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# **REPORT:**

# EPL 8127 ENVIRONMENTAL SCOPING REPORT PLUS IMPACT ASSESSMENT

PROJECT NUMBER: ECC-88-351-REP-06-D

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Votorantim Metals (Pty) Ltd

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Assessment

Client Company Name: Votorantim Metals (Pty) Ltd

Client Name: Mr Eckhart Freyer

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#### **EXECUTIVE SUMMARY**

Votorantim Metals Namibia (Pty) Ltd (herein referred to as Votorantim or the Proponent) intends to undertake exploration activities on Exclusive Prospecting Licence (EPL) 8127 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region. The EPL lies in an area south-east of Otavi.

The proposed Project triggers listed activities in terms of the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012. Therefore, an environmental clearance certificate is required. As part of the environmental clearance certificate application, an Environmental Impact Assessment (EIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No. 7 of 2007. This environmental report and environmental management plan (EMP) shall be submitted to the competent authority as part of the application for the environmental clearance certificate.

The proposed exploration activities on EPL 8127 include soil sampling, ground, and airborne geophysical surveys (audio-magnetotelluric, induced polarization and magnetic ground surveys), geological mapping, and exploration drilling on selected target areas. Some limited bush-clearing in bush encroached areas will be carried out, for the creation of working areas and access tracks where necessary. All site activities will be managed according to stringent environmental requirements that Votorantim upholds in its exploration Project s, as per its own corporate policies. Access agreements will be entered into with all farmers or holders of private ground which may be accessed.

The exploration activities will commence as soon as an environmental clearance certificate has been granted and activities are expected to be conducted over a 3-year period, or the duration of the exploration licence.

The vegetation type covered by this EPL area is thornbush shrubland. It is broadly classified as a dense shrubland vegetation structure, with vegetation dominated by relatively dense stands of woody shrubs and trees. The area supports a high terrestrial diversity of animal and plant life, with the plant diversity in the area supporting more than 500 species.

The impacts of exploration activities related to airborne dust are expected to be limited to vehicular traffic. There will be some release of exhaust fumes from machinery that will impact the immediate vicinity but will be of short duration and limited distance from the source. Additionally, there will be associated drilling and machinery noise, which could be a disturbance to immediate neighbours and possibly wildlife, but this will be of short duration.



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Through further investigation, it was determined that the effects from noise are considered to be of minor significance, however with additional mitigation, the significance is reduced to low. The additional mitigation measures include:

- Residents shall be provided at least two weeks' notice of drilling operations within 1km of their property;
- Activities will be minimized to allocated daylight working hours;
- Continual engagement with residents shall be undertaken by the Proponent to identify any concerns or issues, and appropriate mitigation and management measures shall be further agreed; and
- Noise suppression measures shall be applied if drilling occurs in locations that may affect residents.

EPL 8127 is located mainly in the Kunene South Groundwater Basin. The area is underlain by dolomites, which show a high potential of groundwater with an increased potential where fractures and faults occur on a local scale. The aquifer is reliable, as it is frequently recharged and water quality is generally of a high standard (Mendelsohn et al., 2002). The potential for contamination from the proposed activities is regarded as minimal. Protection of water quantity and quality is addressed in the EMP.

This study concluded that a potential environmental risks, which may require further investigation, is related to the cumulative impacts as a result of visual disturbance, nuisance of noise, the loss of sense of place and potential conflict with farm or landowners due to ongoing exploration activities and increased movement onsite. Receptors are farm owners, neighbours, tourists, and visitors. The identified risks potentially requiring further investigation are considered to be of moderate significance, however with additional mitigation, the significance can be reduced to minor. These additional mitigation measures include:

- Landowners and neighbours should be engaged prior to the commencement of the exploration activities and access agreements should be agreed upon
- Frequent and regular engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon.
- Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock;
- Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property; and
- Positioning of drill equipment in such a way that it is out of sight from human receptors.

The overall potential impact of this proposed Project is not considered significant as it does not widely exceed recognised levels of acceptable change, does not threaten the integrity of the receptors, and it is not material to the decision-making process. The assessment is considered to be comprehensive and sufficient to identify impacts, and it is concluded that no further assessment is required.



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# **DEFINITIONS AND ABBREVIATIONS**

ABBREVIATIONS	DESCRIPTION	
AEM	Airborne Electromagnetic	
AIDS	Acquired Immune Deficiency Syndrome	
AMT	Audio Magneto Telluric	
COVID19	Corona Virus Disease 2019	
DEA	Directorate of Environmental Affairs	
ECC	Environmental Compliance Consultancy	
EIA	Environmental Impact Assessment	
EIA	Environmental and Social Impact Assessment	
EMA	Environmental Management Act	
ЕМР	Environmental Management Plan	
EPL	Exclusive Prospecting Licence	
EIA	Environmental and Social Impact Assessment	
GSN	Geological Survey of Namibia	
HIV	Human Immunodeficiency Virus	
I&AP	Interested and Affected Parties	
IFC	International Finance Corporation	
IHME	Institute for Health Metrics and Evaluation	
MAWLR	Ministry of Agriculture and Land Reform	
MEFT	Ministry of Environment, Forestry and Tourism	
ММЕ	Ministry of Mines and Energy	
MPMRC	Minerals (Prospecting and Mining Rights) Committee	
NDP5	National Development Plan Five	
NSA	National Statistics Agency	
RAB	Rotary Air Blast	
RC	Reverse Circulation	
SOP	Standard Operating Procedure	
ТВ	Tuberculosis	

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# **TERMINOLOGIES ASSOCIATED WITH EXPLORATION**

TERM	DESCRIPTION
REMOTE SENSING	Techniques in mineral exploration enable explorers to evaluate large areas of the earth remotely without having to undertake ground-based exploration operations. Remote sensing may be used to map the geology and structure that potentially localise the ore deposits, or may be used to identify rocks, which have been hydrothermally altered. Remote sensing involves the use of aircraft and satellite-based equipment to obtain data to record spectral data from the surface of the earth. Remote sensing includes several tools and techniques including geographical information systems, radar, and sonar. Typically, satellites or high-flying aircraft are used in the data collection process. It is a useful tool when searching for minerals and can indicate where deposits could be located. Remote sensing aids in narrowing down the field survey area and helps to identify target areas that may be considered for more.
AIRBORNE GEOPHYSICAL SURVEYS	Using radiometric techniques, are a key aspect in mineral exploration, enabling explorers to probe underground, mapping geology and structure, including potentially direct identification of mineral deposits. Modern surveys are flown at a low level in a grid pattern, adhering fully to the safety margins prescribed by the Civil Aviation Authority (CAA) of Namibia.
GEOLOGICAL MAPPING	Of outcrops is used to describe the primary lithology and morphology of rock bodies as well as age relationships between rock units. Mapping is a crucial part of refining subsurface targets, as it provides structural information and can be used to predict subsurface geology. This will be conducted concurrently with the geochemical sampling process.
GEOCHEMICAL SAMPLING	Soil and rock sampling is a non-invasive technique to determine the existence and extent of mineralization and a potential resource. Geochemical data are used to focus on areas of higher mineral potential as the Project advances and help to define drill targets. They assist the company to drill more selectively and thereby increase the chances of intersecting mineralised zones during exploration and reduce the overall footprint of exploration and environmental impact in the area. Geochemical surveys will be the first ground exploration method to be undertaken by the Proponent in the licence area.
	<ul> <li>SAMPLING - Selecting a fractional but representative part of the soil or rock for analysis.</li> </ul>
GROUND GEOPHYSICAL SURVEYS	Magnetic or Induced Polarization (IP) techniques may be undertaken, as appropriate, to collect data that indicate essential rock properties, particularly at depth. They are also used to map geological structures. IP surveys involve sending electrical currents into the ground, measured via electrodes along linear cut-lines up to 3 km long to provide access to electrical cables. Small holes in the ground (0.2m x 0.2m x 0.3m) will be required for IP electrodes every 25 or 50m along a survey line. The majority of EM techniques are completely non-invasive and operate by sending electromagnetically induced currents into the ground. EM surveys are conducted along the same linear traverse lines. A variation is the Audio-Magneto Telluric (AMT) technique, in which surveys utilize



TERM	DESCRIPTION
	the same lines and small holes in the ground, but without the application of high voltage electrical currents.
RAB DRILLING	(Rotary Air Blast drilling) is an open-hole technique that injects compressed air down the drill pipe and recovers the drill chip fragments, on the outside of the drill stem.
DIAMOND DRILLING	Entails the use of a diamond-studded drill bit to obtain core samples of two cm or more in diameter. Bio-degradable drill additives will be used during diamond core drilling. Soil, rock, and drill core samples will be temporarily stored at the site office. Exploration activities are usually undertaken in phases, with periods of no field activity between them, whilst awaiting analytical results, and the integration and interpretation of data to decide on the next phase of exploration.



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#### 1 INTRODUCTION

### 1.1 Project overview

Environmental Compliance Consultancy (ECC) has been engaged by the Proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an environmental scoping report plus impact assessment (ESIA) and an environmental management plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations. An environmental clearance application will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT).

The Proponent proposes to undertake mineral exploration activities on EPL 8127 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region. The proposed Project area lies mainly near the B8 road, which runs between Otavi and Grootfontein (Figure 1).



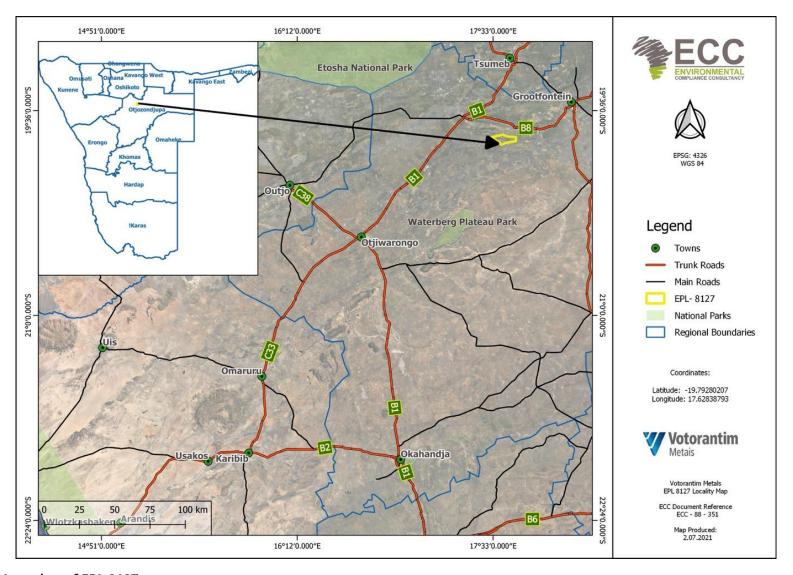


Figure 1 - Location of EPL 8127



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#### A network of farm roads and tracks provide access to the EPL (

Figure 2). Otavi population is approximately 5200 inhabitants and it is located at the intersection of the B1, B8 and the C39 roads in the Otjozondjupa Region. The B1 connects Otavi with Otjiwarongo to the south and Oshivelo to the north.

#### Kombat is the closest town to the EPL, located along the B8 road (

Figure 2). Kombat is a mining town, historically known for its rich copper deposits, however, the copper mining operations ceased in 2008 (Knowledge Kombat, 2016). Kombat has a population of approximately 3 000 permanent residents, with visits from neighbouring farms and settlements for school, medical treatment, and other basic necessities.

# The proposed Project area can be accessed via the B8 road, east of Otavi and via the D2806 road southwest of Kombat (

Figure 2). The following figure provides more detail about surrounding towns and access routes to EPL 8127.



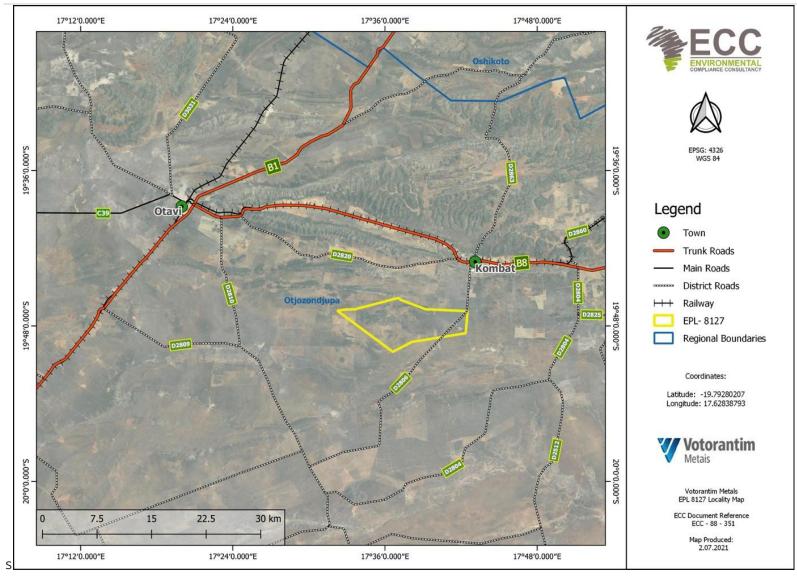


Figure 2 - Accessibility map of EPL 8127



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#### 1.2 Scope of work

The purpose of this report is to present the findings of the assessment for the proposed Project. This scoping report has been outlined in terms of the requirements of the Environmental Management Act, No. 7 of 2007 and its regulations, promulgated in 2012 (referred to herein as the EIA Regulations).

ECC has prepared this report. ECC's terms of reference for the assessment is strictly to address potential effects, whether positive or negative and their relative significance, explore alternatives for technical recommendations and identify appropriate mitigation measures.

This report provides information to the public and stakeholders to aid in the decision-making process for the proposed Project. The objectives are to:

- Provide a description of the proposed activity and the site on which the activity is to be undertaken, and the location of the activity on the site;
- Provide a description of the environment that may be affected by the activity;
- Identify the laws and guidelines that have been considered in the assessment and preparation of this report;
- Provide details of the public consultation process;
- Describe the need and desirability of the activity;
- Provide a high level environmental and social impact assessment on feasible alternatives that were considered; and
- Report the assessment findings, identifying the significance of effects, including cumulative effects, and effective and feasible mitigation measures.

In addition to the environmental assessment, an EMP (Appendix A) is also required in terms of the Environmental Management Act, No. 7 of 2007. An EMP has been developed to provide a management framework for the planning and implementation of exploration activities. The EMP provides exploration standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented and/or minimised as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

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#### 1.3 Proponent Details

The details of the Proponent are set out in Table 1.

**Table 1 - Proponent Details** 

Contact	Postal address	Email address	Telephone
VOTORANTIM METALS NAMIBIA	P O Box 97957,	efreyer@iway.na	+264 81 124 7342
(PTY) LTD	Windhoek		
Mr Eckhart Freyer	Namibia		

#### 1.4 Environmental consultancy

ECC, a Namibian consultancy (registration number Close Corporation 2013/11401), has prepared this scoping report and impact assessment on behalf of the Proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across southern Africa, in both the public and private sectors. ECC is independent of the Proponent and has no vested or financial interest in the proposed Project, except for fair remuneration for professional services rendered. All compliance and regulatory requirements regarding this ESIA report should be forwarded by email or posted to the following address:

Environmental Compliance Consultancy PO BOX 91193

Klein Windhoek, Namibia Tel: +264 81 669 7608

Email: info@eccenvironmental.com

### 1.5 Environmental legal requirements

The Environmental Management Act, No.7 of 2007 stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the Project in terms of the Environmental Management Act, No. 7 of 2007 and its regulations are as follows:

Table 2 - Listed activities triggered by the Project

Listed activity	ESIA screening finding
FOREST ACTIVITIES	The proposed Project may require limited vegetation
4. The clearance of forest areas, deforestation,	clearing in bush encroached areas for access tracks
timber harvesting or any other related activity	and site camps. Specially protected plant species will
that required authorisation in terms of the Forest	not be cleared without approval from the competent
Act, 2001 (Act No. 12 of 2001) or any other law.	authority.



Listed activity	ESIA screening finding
WATER RESOURCE DEVELOPMENTS	Due to the drilling of exploration boreholes, the
8.1 The abstraction of groundwater or surface water	abstraction of groundwater is possible, although it is
for industrial or commercial purposes.	intended that water will be obtained from existing
	boreholes in the proposed Project area.
MINING AND QUARRYING ACTIVITIES	The proposed Project has obtained an EPL from MME;
3.1 The construction of facilities for any process or	the Proponent now requires an environmental
activities which requires a licence, right or other	clearance certificate from DEA/MEFT for the search of
forms of authorisation, and the renewal of a licence,	base and rare metals, industrial minerals, and precious
right or other forms of authorisation, in terms of the	metals.
Minerals (Prospecting and Mining Act), No. 33 of	
1992.	Soil and rocks will be sampled within selected target
	areas of the Project area.
3.2 Other forms of mining or extraction of any	
natural resources whether regulated by law or not.	
3.3 Resource extraction, manipulation, conservation,	
and related activities	



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### 2 APPROACH TO THE IMPACT ASSESSMENT

#### 2.1 Purpose of the environmental impact assessment

The EIA process in Namibia is governed and controlled by the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012, which is administered by the Office of the Environmental Commissioner through the DEA of the MEFT.

The aim of this assessment is to identify, predict, evaluate, and mitigate the potential impacts of the proposed Project on the natural and human receiving environment, scope the available data and identify the gaps that need to be filled. The assessment process helps to determine the spatial and temporal scope and identify the assessment methodology which is most applicable for use. In addition, the assessment process and subsequent reports are to apply the principles of environmental management to the proposed activities; reduce the negative and increase the positive impacts arising from the Project; provide an opportunity for the public to consider the environmental impacts of the proposed Project through meaningful consultation, and to provide a channel to present the findings of the assessment process to competent authorities for decision making.

#### 2.2 THE ASSESSMENT PROCESS

The ESIA methodology applied to this assessment has been developed using the International Finance Corporation (IFC) standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012), which establishes the importance of:

- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of Project s
- Effective community engagement through disclosure of Project -related information and consultation with local communities on matters that directly affect them
- The client's management of environmental and social performance throughout the life of the Project

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (Republic of Namibia, 2008) as well as the international and national best practice; and over 25 years of combined EIA experience, were also drawn upon in the assessment process.

This impact assessment is a formal process in which the potential effects of the Project on the biophysical, social, and economic environments are identified, assessed, and reported so that the significance of potential impacts can be taken into account when considering whether to grant approval, consent or support for the proposed Project.



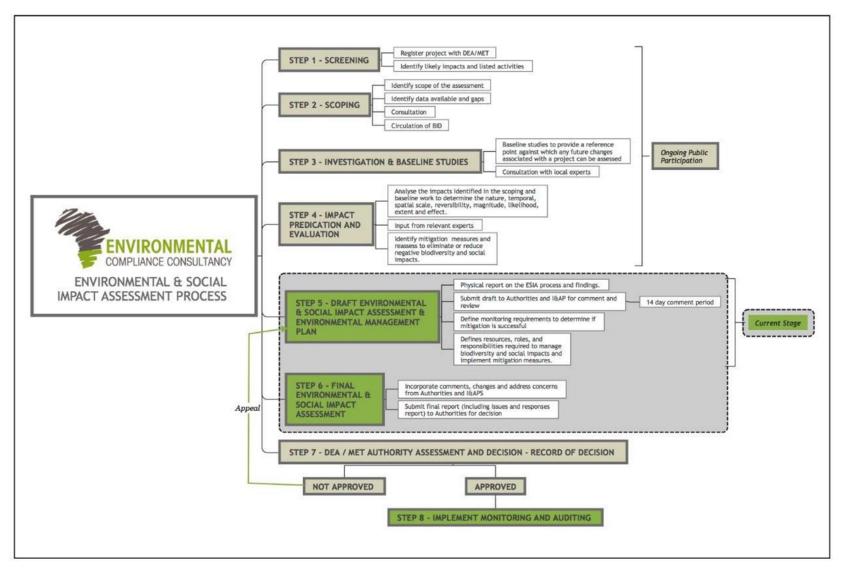


Figure 3 - ECC scoping process



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### 2.3 Screening of the Proposed Project

The first stages in the ESIA process are to register the Project with the DEA / MEFT (completed) and undertake a screening exercise to determine whether it is considered as a listed activity under the Environmental Management Act, No. 7 of 2007 and associated regulations and if significant impacts may arise from the Project. The location, scale, and duration of Project activities will be considered against the receiving environment.

It was concluded that an ESIA (e.g. scoping report and EMP) is required, as the proposed Project is considered as a listed activity and there may be potential for significant impacts to occur.

#### 2.4 SCOPING OF THE ENVIRONMENTAL ASSESSMENT

Where an ESIA is required, the second stage is to scope the assessment. The main aims of this stage are to determine which impacts are likely to be significant (the main focus of the assessment); scope the available data and any gaps which need to be filled; determine the spatial and temporal scope; and identify the assessment methodology.

The screening phase of the Project is a preliminary analysis to determine ways in which the Project interact with the biophysical, social, and economic environment. Impacts that are identified as potentially significant during the screening and scoping phases are taken forward for further assessment in the ESIA. The details and outcome of the screening process are discussed further in sections 6 and 7.

Feedback from consultation with the client and stakeholders are also informed in this process.

The following environmental and social topics and subtopics were scoped into the assessment:

#### SOCIO-ECONOMIC ENVIRONMENT

Limited goods and services procurement within the local economy.

#### **BIOPHYSICAL ENVIRONMENT**

- Dust emissions
- Soil and geology
- Terrestrial ecology
- Terrestrial biodiversity (including fauna and flora)
- Groundwater (potential cumulative impact). Water management suggestions are contained in the EMP.

The following topic was scoped out of the ESIA, as no likely significant impacts are predicted as the proposed Project poses little to no change from the current baseline, therefore are not discussed further in this report.



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**Heritage:** A desktop review of the general EPL 8127 area revealed no sites of heritage interest and no sites of heritage connotation. There are no known heritage sites of value near or around the proposed Project site either.

Although, it is unlikely that the proposed exploration activities would potentially uncover and impact any sensitive and or high value heritage finds in the area, impacts were considered and assessed.

Mitigation measures have been included in the EMP which also contains a Standard Operating Procedure (SOP) called a "Chance-Find" procedure to be utilised in the unlikely event of a possible archaeological find during exploration.

#### 2.5 BASELINE STUDIES

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed Project can be measured. For the proposed Project, baseline information was obtained through a desktop study, consultation, and engagement with stakeholders (Appendix C), focusing on environmental receptors that could be affected by the proposed Project, verified through site-specific information. The baseline information is covered in Section 5.

#### 2.6 ESIA CONSULTATION

Public participation and consultation are a requirement in terms of Section 21 of the Environmental Management Act, No. 7 of 2007 and its regulations for a Project that requires an environmental clearance certificate. Consultation is a compulsory and critical component in the ESIA process, aimed at achieving transparent decision-making, and can provide many benefits.

The objectives of the stakeholder engagement process are to:

- Provide information on the Project to I&APs: introduce the overall concept and plan;
- Clarify responsibility and regulating authorities;
- Listen to and understand community issues, concerns and guestions;
- Explain the process of the ESIA and timeframes involved; and
- Establish a platform for ongoing consultation.

#### 2.6.1 INTERESTED AND AFFECTED PARTIES

The proposed Project (EPL 8127) overlaps with nine farms (Figure 4). All owners of the farms that overlap or border EPL 8127 were identified as I&APs, as well as the relevant authoritative bodies. Other I&APs will be identified through invitations such as the newspaper advertisements and site notices.





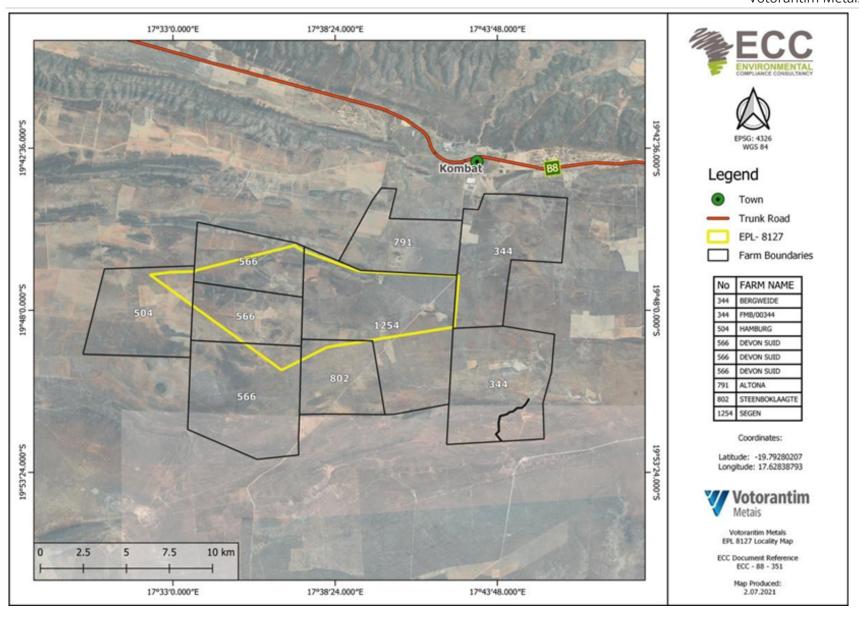


Figure 4 - Location of EPL 8127 relative to neighbouring farms



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#### 2.6.2 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed Project; sets out the ESIA process and when and how consultation is undertaken; and provides contact details for further Project -specific inquiries to all registered I&APs. The NTS was distributed to registered I&APs and the NTS can be found in Appendix B.

#### 2.6.3 NEWSPAPERS AND ADVERTISEMENTS

Notices regarding the proposed Project and associated activities were circulated in three newspapers namely the 'Republikein, Sun, and Allgemeine Zeitung' on the 21st and 28<sup>th</sup> July (see Appendix C). The purpose of this was to commence the consultation process by informing the public about the Project and enabling I&APs to register any comments and interest raised for the Project.

#### 2.6.4 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of the proposed Project. The notice was set up at the boundary of the EPL as illustrated in Appendix C.

#### 2.6.5 PUBLIC MEETING

In terms of Section 22 of the Environmental Management Act, No. 7 of 2007 and its regulations, for the purpose of registering I&APs. A public meeting is not a requirement during the public consultation process for all proposed Project s. As a result, and based on the public consultation feedback and comments, a public meeting was not deemed necessary for this Project.



#### 2.6.6 CONSULTATION FEEDBACK

The I&APs were encouraged to provide constructive input during the consultation periods. Matters of concern raised during the initial round of consultation are presented in Appendix C.

The public is further being provided an opportunity to send any comments on the draft scoping report and the EMP to be included and addressed, where applicable, in the final documentation. The public review period of the draft reports occurred between November and December 2021. The Proponent met with a particularly concerned I&AP Peter Zensi personally who's concerns are captured below and have been incorporated in Table 9 - scoping assessment findings and proposed mitigation measures and Table 3 environmental risks and issues, and mitigation and monitoring measures section of the EMP.

Table 3 - I&AP stakeholder comments received

No	I&AP / stakeholder comment received	Stakeholder details	Response / clarification		
FEEDBAG	FEEDBACK RECEIVED FROM I&APS FROM THE FIRST ROUND OF PUBLIC CONSULTATION (ADVERTS, SITE NOTICES AND THE NTS MADE AVAILABLE)				
1.	We must, first mention that a seven-day period to review over hundred pages of information is quite short, taking into consideration that we have an unreliable internet connection and that we have full-time work that requires our attention from 07-18 daily. This letter also includes some of Peter Zensi's thoughts, because of the short notice and since he does not currently have access to his computer. We know that this is the period specified in the legal framework, but one could consider whether good practice would be at least two weeks' notice.  We want to point out that this exploration company has been working in this area, and on Mr. Zensi's farm and the company has over time developed a terrible reputation. Our scepticism and concerns are thus	Mr. M Von Maltzahn via email 16 November 2021	Refer to Section 2.7 describing the review periods as provided throughout the public consultation phase. Furthermore, a face-to-face meeting was held with Mr Zensi by the Proponent during the latter part of November 2021. Refer to Appendix B of this report which contains evidence of site notices placed as per the EM Act regulations.		

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No	I&AP / stakeholder comment received	Stakeholder	Response / clarification
		details	
	related specifically to the company that now demand access to our farms.  Furthermore, Mr. Zensi asked for a meeting in Kombat, and this meeting has not yet taken place. We are now more than 50 % of the affected parties, and we demand a formal meeting in Kombat to discuss the reports and the upcoming exploration. This includes more information on the specific sites of EPL 8127, and the details of the EPL 8127. To our knowledge there have been no notices on the perimeter of the EPL 8127 informing the affected parties of the exact boundaries.		
	We demand written contracts before any exploration can be conducted on the farms. From previous experiences, we know that there will be considerable costs and expenses related to having the exploration teams on our farms and that we will be expected to handle the damages and repairs related to their activities. A written contract clearly stipulating the responsibilities, fines, actions, and environmental mitigations must be in place before any work can commence.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence.
	Roads  In the Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. From previous experiences, we know for a fact that the activities have caused huge disruptions and problems. We rely on our farm roads for all our farming activities, and we depend on them to be always drivable. We cannot afford to risk that heavy use of	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	The conditions associated with the use of access roads by the exploration team will be negotiated and agreed to between the landowner and the Proponent and included in the land access agreement prior to commencing with exploration activities. See Table 9 for further recommendations to maintain road surfaces.



No	I&AP / stakeholder comment received	Stakeholder details	Response / clarification
	these fragile roads will negatively affect our ability to conduct our livelihoods. In the wet season we prohibit all exploration activities.		
	Water  The use of water from the boreholes on the farms will need to be discussed and agreed on and specified in a contract. Farm Segen does not have water available for the exploration activities and thus water must be supplied by the Proponent and brought to site.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case no permit applications are necessary. Agreements and conditions are negotiated between the Proponent and the landowner. Should water not be sufficient the Proponent may buy and transport water to site.
	Accommodation  We will not allow accommodation in the form of camps on the farms, and we expect all personnel to be off the farms in the hours between sunset and sunrise.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. This aspect is encouraged to be included in the land access agreement with specific terms and conditions as agreed to between both parties.
	Farming activities  No one of our farming activities should be affected by the exploration activities. This includes beef production based on a rotational grazing system and irrigation.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence. Refer to Table 9, page 82 of 103 that stipulate that farm owners should always have access to all areas of their farms to allow their business to continue uninterrupted.
	We would like to stress the importance of a meeting here in Kombat for discussing the necessary contract stipulating the activities that are to be undertaken on the farm.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property.  The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence.
	This exploration company has a really bad track record.  Peter Zensi and other farmers have already been subjected to their bad practices, and although the		



No	I&AP / stakeholder comment received Stakeholder Response / clarification		
NO	18AF / StakeHolder comment received	details	Response / Clarification
	Scoping Report plus Impact Assessment mentions mitigations to limit the negative effects of the exploration activities, we know that these measures have not been taken.  There is no access to our farms until we have signed written contracts.	uetalis	
2.	2.10 of the EIA a monitoring strategy and audit procedure will be determined by the Proponent and competent authority. Who is this competent authority? In the 2.5 years Votorantim are prospecting on Hartbeespoort I have not noticed any monitoring nor a competent authority.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Competent authorities for the proposed Project are MME and MEFT. Monitoring and audit procedures are done by the independent auditor as set up by the Proponent and when required by the competent authority. Quarterly and annual reports are submitted to MME as per the requirements of the EPL mineral rights.
	Page 26 of 95 abstraction of ground water needs a permit and quantities must be reported. Who controls that this is done?	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case no permit applications are necessary. Agreements and conditions are negotiated between the Proponent and the landowner. Should water not be sufficient the Proponent may buy and transport water to site.
	Soil Conservation" Makes provision for the <u>prevention</u> and <u>control</u> of soil erosion." All I find in the EMP are diversions to control erosion, no mention of prevention. Please add measures to prevent erosion i.e., no driving during wet conditions which can lead to deep tracks and run-off of rainwater and erosion. New access roads e.g., to a drill site not to run up straight on a slope etc.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7, Table 9 of the impact assessment and the EMP page 25 of 27, Table 3. The creation of access roads point noted and added.



No	I&AP / stakeholder comment received	Stakeholder details	Response / clarification
	Prospecting should take 2 – 6 months? Votorantim were busy from June 2019 and started drilling in June 2021 – 2 years.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Exploration activities are granted by the EPL licence for 3 years and by the environmental clearance certificate for 3 years and therefore should the Proponent obtain all necessary approvals; they can prospect on the specific EPL for the validity period. Exploration activities may be classified in different phases.
	Page 50 of 95 The noise is not the problem, it is the continual movement of vehicles and people on the farm: no stranger is allowed to move on the farms, as this is private property. Now suddenly every day strangers are allowed to move freely in vehicles and on foot around your private property. This causes a lot of stress to the owner/manager as any stranger is seen as a potential danger to the safety and property of the residents on the farm. It makes the control of stock theft, theft of solar panels and submersible pumps much more difficult. Although you mention that theft may increase due to Votorantim's activities I do not find any mitigation in your study.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	For clarity in our study, it has been assessed that the exploration team may be blamed for stock theft due to their presence in the area. Please refer to the ESIA chapter 7, Table 9 page 69 of 95 and the EMP Table 3, pages 19 of 27 and 20 of 27.
	Page 54 of 95 Employment of people from Otavi: Votorantim and their contractors must make sure to employ trustworthy people with good references from previous employers. These employees are a potential threat to the safety of farmers and their property. Votorantim must provide the farmer with a list of names, as well as copies of ID documents and residential addresses.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project. The proposed Project has their own HR policies and selection procedures of employees. Please be informed that access agreements are only negotiated between the Proponent of the proposed Project and the farm owner and not the environmental consultant.
	Page 58 of 95 Waste management: no mention of the danger of cattle and wildlife being infested with measles due to infected person defecating into the veld. Long lasting,	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Transmission of Measles: Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also, measles virus can live for up to two hours on a surface or in an airspace



No	I&AP / stakeholder comment received	Stakeholder	Response / clarification
	as once infected, measles stays in the body of the animal for the rest of its life. When slaughtered, N\$ 10.00 per kg slaughter weight is being deducted from the proceeds, as this meat cannot be sold as fresh meat. 250 kg slaughter weight x 10.00 = N\$ 2,500.00 per infected carcass.	details	where the infected person coughed or sneezed. If other people breathe the contaminated air or touch the infected surface, then touch their eyes, noses, or mouths, they can become infected. Measles is so contagious that if one person has it, 90% of the people close to that person who are not immune will also become infected. In the EMP Table 3, page 24 of 27 it states that appropriate and functional toilets shall be ensured for the campsites
	Page 61 of 95 Increased movement of people, machinery and vehicles leads to disturbance of wildlife which leaves the area. This is of major concern to farmers who rely on hunting and sale of venison for an income.  Mitigation: please add "as little movement as possible, at low speeds. If wildlife is encountered, stop and give it time to move off slowly."	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7 Table 8, page 61 of 95 and EMP Table 3 page 20 of 27, moreover it states that Restrict speed of vehicles (<30km/h) on site.
	Deterioration of roads: drive as little as possible, not at all during wet conditions. Make provision for rehabilitation of damaged roads by the Proponent. They leave the problems to the farmers. High magnitude of change and high significance, not minimal!	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7, Table 8 of the impact assessment and the EMP page 25 of 27, Table 3. Creation of access roads point noted and added.
	1.4 Management of the EMP. The monitoring of compliance shall be undertaken as well as monthly inspections. Who does these inspections? I have witnessed none of them.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel Table 1, page 8 of 27. The Table 3 further outlines the recommended monitoring periods and responsible personnel.



No	No I&AP / stakeholder comment received Stakeholder Response / clarification		
		details	
	2.3 Employment: please add points mentioned above	Peter Zensi Farm Hamburg # 504 21 Nov. 21	It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project. The proposed Project has their own HR policies and selection procedures of employees.  Please be informed that access agreements are only negotiated between the Proponent of the proposed Project and the farm owner.
	5.2 Objectives Please add No damage to farm infrastructure e.g., Roads, water installations and fences.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	kindly refer to the EMP, Table 3 page 25 of 27.
	Groundwater: "Where possible, water from existing water sources shall be used" – please change to "for drilling Votorantim shall make provision for their own water sources" In our area we have enough water for our farming activities, but we do not have additional 30 m3 per day for drilling.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent may only use water resources such as existing boreholes subject to agreements with the landowner. In our studies water may be brought to site in a case where there is insufficient supply of water.
	Waste management: please explicitly mention functional toilets and who must inspect at which intervals, that they are used.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel. In the EMP Table 3, page 24 of 27 it states that appropriate and functional toilets shall be ensured for the campsites.
	Executive Summary  "All site activities up to Votorantim's standards" This is very vague. What standards do Votorantim uphold?	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent has to comply to the standards, laws, and policies outlined in Namibian Laws such as the Environmental Management Act of 2007 and the Minerals (Prospecting and Mining) Act, 1992 (No. 33 of 1992).  The Proponent's response: Votorantim Metals is a Namibian subsidiary of Nexa Resources that is a global company, listed in the stock Exchange of Toronto and New York. The main focus of the company is base metals, such as Lead, Zinc and Copper.



No	I&AP / stakeholder comment received Stakeholder Response / clarification		
INO	locar / stakeholder comment received	details	Response / Clarification
FEEDBAC 2	K RECEIVED FROM I&APS FROM THE SECOND ROUND OF Thank you for incorporating most of my issues into the EMP for EPL 8127. Two issues remain, which I feel strongly about:  1. The easier one: please make functional toilets mandatory for drill sites as well, not only camp sites.		The exploration activities are part of the portfolio, and Votorantim aim to perform exploration in the ground to initially evaluate the mineral potential. The exploration reports and more information about Nexa can be seen in the link below.  https://www.nexareport.com/2020/en/operations-and-Project s/  TON (SCOPING REPORT MADE AVAILABLE)  The use of functional chemical toilets on drill sites has been included on page 28 of 31 in the EMP.
	Although the higher risk of poaching, cattle theft, and theft of solar pump equipment etc. is recognised, no mitigation is proposed. Instead, you encourage employment out of the local unemployed community. This harbours the highest risk of employing criminals.  I would employ staff from another community e.g., Otjiwarongo with:  1. Valid ID documents 2. Social Security cards 3. Reference from previous employer 4. Cell phone number 5. Residential address  This should apply to Votorantim as well as their contractors e.g., Ferrodrill.	Peter Zensi Farm Hamburg # 504 via email 27 February 2022	Mitigation to the poaching, livestock and equipment theft risks are addressed through the explicit requirements in the EMP, which is to apply access control measures and restricting all movements to areas of activities only by the site manager or supervisor as outlined on pages 22 and 23 within the EMP. Emphasis is also put on awareness creation training of all personnel on site to sensitise them of these contentious issues. Subsequent to these operational protocols, the EMP becomes a legally binding document once approved by the MEFT and is subject to compliance monitoring on site on a regular basis.  As referenced before, It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project. However, The EMP was updated to include the farm owners on whose property exploration is to occur during the recruitment process of local labour on page 30 within the EMP.



No	I&AP / stakeholder comment received	Stakeholder	Response / clarification
		details	
	Before the start of exploration, the farmer receives a list with the names and attached certified copies of the ID's of persons allowed on the premises. All other persons are charged for trespassing. I found staff of another drill site on my farm, drill foreman was exchanged without my knowledge, family members spend the day on site, mechanics come and go as they like, even a person from a completely different company was training Ferodrill staff on my farm, all without my consent. It cannot be that obtaining an EPL turns my private farm into a public place where anybody does as he/she wishes.		In addition, the impact of social discomfort and anxiety on farmers is addressed on page 78 of this report. The corelating mitigation proposed to deal with this aspect is described on page 22 of the EMP within Table 3.  Table 9 acknowledges that the presence of workers on private farmland is a sensitive issue and therefore states that the option to utilise farmland for exploration campsites should be discussed and agreed to by the farm owner first.



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#### 2.7 Draft EIA and EMP

This report and EMP for the Project 's environmental clearance includes an assessment of the biophysical and social environment, which satisfies the requirements of Step 5 (Figure 3).

The EIA report documents the findings of the assessment process, provides stakeholders with the opportunity to comment and continue to engage in consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed Project and outlines specific roles and responsibilities to fulfil the plan.

This EIA report focuses on the significant impacts that may arise from the proposed Project as described in Step 4 (Figure 3). These impacts are discussed in Chapter 7.

This EIA report was open to stakeholders and I&APs for consultation from the 9<sup>th</sup> to the 16<sup>th</sup> of November 2021. Thereafter the updated reports were circulated to I&APs between 18-25 November 2021 totalling 14 days. The report was again updated with comments from I&APs and circulated between (17/02/2021 – 04/03/2021) for a 14-day period, meeting the mandatory requirement of 7 days as set out in the Environmental Management Act, No. & of 2007 and its Environmental Impact Assessment Regulations, No. 30 of 2012. The aim of this stage was to ensure all stakeholders and I&APs have the opportunity to provide final comments on the assessment process and findings and register their concerns. However, none of the I&APs consulted throughout this process provided any new issues or concerns.

#### 2.8 FINAL EIA AND EMP

The final EIA report and associated appendices will be available to all stakeholders on the ECC website <a href="https://www.eccenvironmental.com">www.eccenvironmental.com</a> and <a href="https://www.eccenvironmental.com">MEFT portal</a>. All I&APs will be informed via email.

The EIA report and appendices are formally submitted to the Office of the Environmental Commissioner, DEA department as part of the application for an environmental clearance certificate.

#### 2.9 AUTHORITY ASSESSMENT AND DECISION MAKING

The Environmental Commissioner in consultation with other relevant authorities will assess if the findings of the EIA presented in the EIA report is acceptable. If deemed acceptable, the Environmental Commissioner will revert back to the Proponent with a record of decision and any recommendations.

#### 2.10 Monitoring and auditing

In addition to the EMP being implemented by the Proponent, a monitoring strategy and audit procedure will be determined by the Proponent and competent authority. This will ensure key



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environmental receptors are monitored over time to establish any significant changes from the baseline environmental conditions caused by Project activities.



## **3 REGULATORY FRAMEWORK**

This chapter outlines the regulatory framework applicable to the proposed Project. Table 4 provides a list of applicable legislation and the relevance to the Project. An environmental clearance is required for any activity listed as per Government Notice No 29 of 2012 of the EMA.

#### 3.1 NATIONAL LEGISLATION

**Table 4 - Legal compliance** 

National regulatory regime	Summary	Applicability to the Project
Constitution of the Republic of Namibia of 1990	The Constitution of the Republic of Namibia, 1990 clearly defines the country's position in relation to sustainable development and environmental management. The constitution refers that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at the following:  "Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present, and future; in particular, the government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory."	
Minerals (Prospecting and Mining) Act, No. 33 of 1992	Provides for the reconnaissance, prospecting, and mining for, and disposal of, and the exercise of control, minerals in Namibia.  Section 50 (i) requires "an environmental impact assessment indicating the extent of any pollution of the environment before any prospecting operations or mining operations are being carried out and an estimate of any pollution, if any, likely to be caused by such prospecting operations or mining operations"	EIA to be carried out as it triggers listed activities in the Environmental Management Act and its regulations. This report presents the findings of the EIA.  Works shall not commence until all conditions in the Act are met, which includes an agreement with the landowners and conditions of

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National regulatory regime	Summary	Applicability to the Project
	Section 50 sets out that in addition to any term and condition contained in a mineral agreement and any term and condition contained in any mineral licence, it shall be a term and condition of any mineral licence that the holder of such mineral licence shall:  Exercise any right granted to him or her in terms of the provisions of this Act reasonably and in such manner that the rights and interests of the owner of any land to which such licence relates are not adversely affected, except to the extent to which such owner is compensated.  Section 52 sets out that the holder of a mineral licence shall not exercise any rights conferred upon such holder by this Act or under any terms and conditions of such mineral licence  (a) In, on or under any private land until such time as such holder.  (i) Has entered into an agreement in writing with the owner of such land containing terms and conditions relating to the payment of compensation, or the owner of such land has in writing waived any right to such compensation and has submitted a copy of such agreement or waiver to the Commissioner.	records, maps, plans and financial statements, information, reports, and returns submitted.  As the Proponent will need to access privately owned land the Proponent will ensure Sections 50 and 52 are complied with.
Environmental Management Act, (No. 7 of 2007) and its regulations, including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2012)	The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment.  It sets the principles of environmental management as well as the functions and powers of the minister. The Act requires certain activities to obtain an environmental clearance	of the environmental assessment undertaken for the proposed



National regulatory regime	Summary	Applicability to the Project
	certificate prior to Project development. The Act states an EIA may be undertaken and submitted as part of the environmental clearance certificate application.  The MEFT is responsible for the protection and management of Namibia's natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the EIA process.	
Water Act, No. 54 of 1956	The Water Resources Management Act, no 11 of 2013 has been billed, but not promulgated, it cannot be enacted as the regulations have not been passed – so the Water Act 54 of 1956 is still in effect. This act provides for "the control, conservation and use of water for domestic, agricultural, urban and industrial purposes; to make provision for the control, in certain respect and for the control of certain activities on or in water in certain areas".  The Department of Water Affairs within the Ministry of Agriculture Water and Land Reform (MAWLR) is responsible for the administration of the act.  The Minister may issue a permit in terms of regulations 5 and 9 of the government notice R1278 of 23 July 1971 as promulgated under section 30 (2) of the Water Act no. 54 of 1956, as amended.	The Act stipulates obligations to prevent pollution of water. Should wastewater be discharged, a permit is required. The EMP sets out measures to avoid polluting the water environment.  Measures to minimise potential groundwater and surface water pollution are contained in the EMP.  Abstraction of water from boreholes requires an abstraction permit. Abstraction rates need to be measured and reported to the authorities in accordance with the requirements of this legislation. In addition, annual reporting on the environmental impacts of water abstraction is recommendable. Should the Project require drilling and abstraction of water from underground sources, an application should be submitted to the authorities.
Soil Conservation Act, No. 76 of 1969) and the Soil Conservation Amendment Act, No. 38 of 1971)	Makes provision for the prevention and control of soil erosion and the protection, improvement and the conservation, improvement, and manner of use of the soil and vegetation.	This will be taken into consideration during the intention of the works to be undertaken within the EPL 8127 site. Measures in the EMP set out methods to avoid soil erosion.
The Forestry Act, No. 12 of 2001 as amended by the	Section 22 requires a permit for the cutting, destruction or removal of vegetation that are classified under rare and or protected species; clearing the vegetation on more than 15	The planned Project activities will include minimal vegetation clearing to support exploration activities. The necessary permit should be obtained from the MEFT, where the application should satisfy that the



National regulatory regime	Summary	Applicability to the Project
Forest Amendment Act, No. 13 of 2005	hectares on any piece of land or several pieces of land situated in the same locality which has predominantly woody vegetation; or cut or remove more than 500 cubic metres of forest produce from any piece of land in a period of one year.	cutting and removal of vegetation will not interfere with the conservation of soil, water, or forest resources.
National Heritage Act, No. 27 of 2004.	The Act provides provision of the protection and conservation of places and objects with heritage significance.  Section 55 stipulates that exploration companies must report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued	In the unlikely event for heritage objects to be found on site, the stipulations in the Act have been taken into consideration and are incorporated into the EMP.  Section 55 compels exploration companies to report any archaeological findings to the National Heritage Council after which a permit needs to be issued before the find can be disturbed. In cases where heritage sites are discovered the 'chance find procedure' will be used





Table 5 - National policies

National regulatory	Summary	Applicability to the Project
regime		
Vision 2030	Vision 2030 sets out the nation's development programmes and strategies to achieve its national objectives. It sets out eight themes to realise the country's long-term vision.  Vision 2030 states that the overall goal is to improve the quality of life of the Namibian people to a level in line with the developed world.	The planned Project shall meet the objectives of Vision 2030 and shall contribute to the overall development of the country through continued employment opportunities.
The Fifth National Development Plan (NDP5)	NDP5 is the fifth in the series of seven five-year national development plans that outline the objectives and aspiration of Namibia's long-term vision as expressed in Vision 2030. NDP5 is structured on the pillars of economic progression, social transformation, environmental sustainability, and good	The planned Project supports meeting the objectives of NDP5 by creating specialised or skilled opportunities for employment to the nearby community and the Namibian nation.
Min avala Palina	governance. Under the social transformation pillar is the goal of improved education.	The chiestine of the Minauele Deline are in line with the
Minerals Policy	The Minerals Policy was adopted in 2002 and sets guiding principles and direction for the development of the Namibian mining sector while communicating the values of the Namibian people. It sets out to achieve several objectives in line with the sustainable development of Namibia's natural resources. The policy strives to create an enabling environment for local and foreign investments in the mining sector and seeks to maximise the benefits for the Namibian people from the mining sector while encouraging local participation, amongst others.  The objectives of the Minerals Policy are in line with the objectives of the Fifth National Development Plan that include reduction of poverty, employment creation and economic empowerment in Namibia.	The objectives of the Minerals Policy are in line with the objectives of the NDP5, i.e. reduction of poverty, employment creation, and economic empowerment in Namibia. The proposed Project conforms to the policy, which has been considered through the EIA process and the production of this report.
Labour Act, No. 11 of 2007	The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health & Safety provisions of Employees at Work promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)	The proposed Project will comply with stringent health and safety policies, including the compulsory use of specific PPE in designated areas to ensure adequate protection against health and safety risks. Proper storage and labelling of hazardous substances are required. The Project will ensure employees in charge of and working with hazardous substances need to be aware of the specific hazardous substances in order not to compromise worker and environmental safety.

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### 3.2 PERMITS, LICENCES, OBLIGATIONS

#### 3.2.1 EXCLUSIVE PROSPECTING LICENCE

The EPL 8127 was granted on the 25<sup>th</sup> of March 2021 and expires on the 24<sup>th</sup> of March 2024. In terms of the Minerals (Prospecting and Mining) Act, No. 33 of 1992, an EPL may be renewed, however, it may only be extended twice for two-year periods if demonstrable progress is shown. Renewals beyond seven years require special approvals from the Minister (MME, 2018).

Such renewals are subject to a reduction in the size of the EPL. When a company applies for renewal of an EPL, the application must be lodged 90 days prior to the expiry date of the EPL or, with good reason, no later than the expiry date (MET & MME, 2018).

If renewal is applied for, the MME must review the renewal application and make any comments and/or recommendations for consideration by the Minerals (Prospecting and Mining Rights) Committee (MPMRC). Amendments and revisions may be required for the ESIA and EMP. Due consideration must be given when renewing the licence to ascertain whether there is justification to renew the licence. Once an EPL expires and a new EPL is issued, even if it is to the previous holder, the full screening process must be followed with a full EIA process, before operations may commence (MET & MME, 2018).

The permits and licences that may be relevant to the proposed Project's are outlined in Table 6.

**Table 6 - Permits and licences requirements** 

Permit and licences	Relevant authority	Validity/duration
Water abstraction permits	Ministry of Agriculture, Water and Land	Permit dependent
	Reform	
Exclusive prospecting licence	Ministry of Mines and Energy - Windhoek	3 years
Notice of intention to drill	Ministry of Mines and Energy - Windhoek	To be submitted prior to
		drilling
Effluent discharge permit	Ministry of Agriculture, Water and Land	5 years
	Reform	

### 3.2.2 INTERNATIONAL OBLIGATIONS

The International Finance Corporation (IFC) is a member of the World Bank Group and is the largest global development institution focusing on the private sector in developing countries. Its standards have become a global benchmark for environmental and social performance. They form the basis for the Equator Principles (IFC, 2013), a voluntary environmental and social risk-management framework used by 77 financial institutions worldwide.



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The Equator Principles are a framework and set of guidelines for evaluating social and environmental risks in Project finance activities and apply to all new Project s with a total capital cost of US\$10 million or more, no matter what industry sectors, without geographic requirement.

The Equator Principles are not applicable to this specific Project.



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### **4 PROJECT DESCRIPTION**

### 4.1 Need for the proposed Project

The mining sector in Namibia significantly contributes to the country's Gross Domestic Product (GDP), government tax receipts and export revenues. For this reason, exploration activities are encouraged in Namibia and the vision of the Minerals Policy being to "further attract investment and enable the private sector to take the lead in exploration, mining, mineral beneficiation and marketing" supports mineral exploration and development.

The proposed Project is in line with this vision and has the potential to create employment in local communities in the Otjozondjupa Region. In the event that exploration activities are successful, and a resource can be defined, with commercially viable mineral concentrations, exploration operations can result in socio-economic development in the area.

#### 4.2 ALTERNATIVES CONSIDERED

The proposed Project has been subject to a process of design evolution, informed by both consultation and an iterative environmental assessment. In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analysed and presented in the scoping assessment and EIA report. This requirement ensures that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified.

Exploration activities range from extremely low impact exploration such as remote sensing from satellites to more invasive methods such as extensive close-spaced drilling. The methods used shall be determined, based on the exploration programme, which is further designed once more information and data is obtained. At this stage of the Project, the exploration activities are yet to be finalised and therefore a range of options remain.

Once the exploration programme is further defined, the most suitable options and methods shall be identified to ensure the impacts on the environment and society are minimised.

#### 4.2.1 NO-GO ALTERNATIVE

Should exploration activities within EPL 8127 not take place, the anticipated environmental impacts from exploration activities would not occur, however, the social and economic benefits associated with the Project would also not materialize.

There would not be an opportunity to define resources within the Project area, which would be a missed opportunity for geological mapping and data collection that typically adds to regional knowledge of Namibia's mineral wealth and, if found to be viable for mining, would benefit the Namibian economy.



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### 4.3 EXPLORATION METHODOLOGY

All geological and geophysical work will be conducted by contractors. The schedule of activities is presented in Table 7.

Table 7 - List of activities planned per phase

Phase	Date	Activity description
Phase 1: 2021	Field inspection commencement date	Non-invasive Ground Penetrating Radar (GPR) will be done in the first three months
	unknown, desktop work commenced 2021:	
Phase 2:	Actual commencement	RC drilling will then commence soon after for another three-
2022	date unknown: During	month period. Further planning will take place after the
	2022.	results of drilling have been obtained. If results are
		favourable subsequent exploration will continue. However, if not, the sites will be rehabilitated and vacated.

The exploration activities on EPL 8127 will include some or all of the following methods: aerial or remote sensing, geological mapping, geochemical sampling, geophysical surveys and drilling. Details of these methods are described below. Ground-based exploration techniques are inevitable in the search of base, rare and precious metals. Data obtained by remote-sensing data are also used to select target areas.

Diamond drilling and possible Rotary Air Blast (RAB) drilling may occur and the number of holes and aerial extent will be determined by the geochemical and geophysical anomalies obtained. AMT (Audio MagnetoTelluric), IP and magnetic ground surveys shall be undertaken to measure chargeability, conductivity, and magnetic susceptibility of the rocks.

Existing tracks shall be used as far as reasonably practicable. In the event that new tracks are required they will be developed by hand or by use of a bulldozer, terrain dependent. Vegetation clearing will be limited to clearing for access tracks and site camps, should additional areas be cleared for exploration activities the Forest Act, No. 12 of 2001 and its regulations will be complied with (the relevant forestry permits will be applied for if required). Any established or large trees or specially protected plant species shall not be removed, and access tracks will be routed to avoid these wherever possible and permits will be obtained as necessary. Impacts and effects of the geochemical surveys and drilling programmes are likely to be low.

#### 4.3.1 EXPLORATION SCHEDULE

The exploration activities are executed and managed from the Votorantim Exploration Office in Otavi. Field exploration activities, using techniques as discussed above, are anticipated to be carried out over the licence validity period. Remote sensing studies and planning phases for the prospecting programme will require 2-6 months. Geochemical sampling will be undertaken



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concurrently with geological mapping for approximately 2-6 months. Geophysical surveys will then be carried out over a period of about two (2) months after which the Project will advance to reverse circulation or core drilling.

The duration of drilling programs is variable, and usually depends on the information that is gained from drilling. Applications for the environmental clearance certificate, along with all required permits will be submitted during this period should a renewal of the EPL be required.

#### 4.3.2 EQUIPMENT AND MATERIALS

During the exploration phase double and single cab vehicles will be used to transport workers to, from and around the site. Field activities will be organized from Otavi. Contractor's camp infrastructure include tents and chemical toilets, which would be set up on site temporarily if agreed to by the land owner. A drill rig (track-mounted) will be brought to site for core drilling, along with a water truck and supporting equipment (rods truck, water and fuel bowsers, and RC compressor) for use during drilling. Drilling equipment, diesel fuel and consumables shall be brought to the exploration site to support exploration activities when needed.

#### 4.3.3 POWER SUPPLY

The individual contractors will be responsible to supply their own energy needs throughout the duration of their stay within the field camps. The Proponent prefers the use of solar panels and small-scale generators.

#### 4.3.4 WATER SUPPLY

Water will be required for various uses including human consumption during the planned exploration activities and to support any of the exploration activities such as diamond drilling. The water will most likely be sourced from an existing water source on site, after permission has been obtained from the farm owner, of which they will be compensated for water usage. There is generally no shortage of water in the Otavi area. No water will be needed for the first stage of exploration (i.e. soil sampling), 1m3/day water will be required for geophysical surveys in the second stage of exploration and approximately a volume of 30m3 / day of water may be required for diamond drilling in the third stage of exploration.

Water demand per day for the exploration Project is broken down into two usage categories. These are:

- Water for domestic use within field camps: 1m³ per day; and
- Water for exploration activities (drilling): 30m<sup>3</sup>.

Water can be sourced from two sources. These are:

**SOURCE 1**: Potable water will be brought to site. During drilling operations, water shall be used, recirculated, and stored in lined collections ponds. If deemed clean and suitable will be



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discharged to the environment for evaporation or if not suitable for discharge will be transported to a local (Otavi/Otjwarongo/Tsumeb) and suitable waste facility for safe disposal.

**SOURCE 2:** Supplied directly from farmer's boreholes with their permission and compensation. Alternatively, if a demand for water arises and where many holes are to be drilled in an area, then a borehole may be drilled. In this case the required water borehole permits, and abstraction permit shall be obtained from the MAWLR.

#### 4.3.5 WORKERS AND ACCOMODATION

Four to eight possible job opportunities are foreseen during the exploration phase and workers will be sourced from the nearest towns such as Otavi, Grootfontein and Otjiwarongo. The workers will be deployed at various stages of exploration including soil sampling, geological mapping, geophysical surveys, and drilling operations.

It is envisaged that for most of the exploration programme workers will reside in Otavi and be transported to and from the site. The Proponent will provide transport. However, during the latter part of the prospecting (drilling) workers may be required to stay at the exploration site in campsites or in existing housing rented from the property owner. The Proponent shall provide suitable living facilities during this period.

Should the Proponent consider setting up camps for the exploration team on site, precaution and safe use of flammable items should be adhered to. Although fire is unlikely and probably rarely caused by the residing exploration team, there is a growing concern from farmers/ landowners regarding the occurrences of uncontrolled veld fire. In recent years, several farmers have suffered severe losses due to a series of devastating veld fires that occurred, losing hectares of grasslands and cattle consisting of goats and sheep. Mitigation measures have been included in the EMP, which shall be ensured and utilized by the Proponent. Accommodation options for exploration personnel on site should always be done in consultation with the affected landowner and captured within the land access agreement.

#### 4.3.6 SOLID WASTE MANAGEMENT

Waste produced on site will include solid waste such as packaging material and field camps household waste. The solid residue remaining from wastewater will be buried in the soil if not toxic. Hazardous waste if any, such as (hydrocarbon contaminated soil, etc.) will be disposed of at the Walvis Bay municipal landfill site. The drill-sludge is disposed of at the Otavi municipal waste disposal site. The Proponent should ensure waste is collected in categorized bins and that the waste hierarchy of (reduce, reuse, and recycle) is practised as practically as possible.

#### 4.3.7 WASTEWATER EFFLUENT

Wastewater will be diverted into a lined sump to evaporate. Wastewater (e.g. water with drill additives) used during drilling is recycled, contained and allowed to evaporate after use. Sewerage



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may as well, be produced on site and in the case of provision of the mobile toilets to be used on site, sewerage generated shall be managed by the toilet contractor. Wastewater that is discharged into the environment must comply with wastewater discharge specifications.

#### 4.3.8 REHABILITATION

Once exploration activities are completed the areas shall be rehabilitated to a condition as close to the original state as far as possible. Rehabilitation shall be determined during the exploration programme and shall be agreed with the landowners and authorities as per legislation (discussed in Section 3). Before and after photographs will be used to monitor rehabilitation success. The Proponent has committed to restoring any historic exploration disturbance on the site if identified.



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### 5 BASELINE / CURRENT BIOPHYSICAL ENVIRONMENT

This section provides an overview of the existing biophysical environment through the analysis of the baseline data regarding the existing natural and socio-economic environment. Desktop studies on the national database are undertaken to provide current information on the status of the receiving environment. This provides a baseline against which changes due to the proposed Project can be measured.

#### 5.1 CLIMATE

EPL 8127 is located in a part of Namibia which receives higher rainfall than the rest of the country, between 500 and 600 mm of rain per year, with a variation coefficient of less than 30%. Rainfall events are limited to the summer months, mainly between October and April, in the form of thunderstorms often associated with heavy downpours. Potential evaporation is between 1,680 and 1,820 mm per year, meaning an average water deficit of between 1,500 and 1,700 mm per year. Relative humidity is low, rarely more than 20% in winter but may reach 85% in summer before or after thunderstorm build-up. Maximum temperatures average around 32 - 34°C, mainly recorded during the afternoons between November and January, while minimum temperatures are around 6 - 8°C and are normally recorded during nights in June and July. Deviations from these averages are common, with the highest temperatures reaching 38 - 40°C and the lowest temperatures below 6°C. Occasional frost can occur (Mendelsohn et al., 2002).

Due to the rhythm of the pressure systems, the wind patterns over the interior remain fairly predictable. Prevailing wind over EPL 8127 is expected to be from the east and northeast, with occasional airflow from the southeast and southwest. Wind speed is expected to be low with more than two-thirds of the time lower than 2 m/s. The stronger air movements during the afternoons and evenings are the result of the ground being heated more in some places than others, in combination with the orographic effect of the mountains. During the winter months wind speed is slightly higher (Mendelsohn, et al., 2002).

Strong easterly winds blow for several days a year in Namibia, mainly in spring. These are known as Berg Winds. They are hot and dry and result in a considerable increase in fire hazard ratings.

Predominant wind direction is from the east, with an average wind speed of 2.4 mps (meters/second), and a calm of 11.1% (Figure 5) (lowa State University, 2021).

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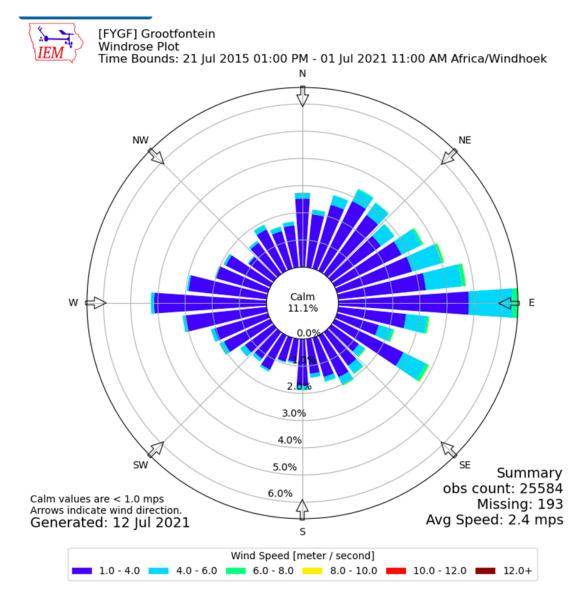


Figure 5 - Prevailing wind direction and wind speed in the area of the proposed Project (Source: Iowa State University, 2021)

#### 5.2 GEOLOGY AND GEOMORPHOLOGY

The local geology of the entire EPL 8127 comprises units of the Swakop Group which forms part of the Damara Sequence (850 to 600 million years) (Figure 6). The Damara Supergroup covers the largest part of the northwest quarter of Namibia and is oriented in a predominantly SW-NE direction with an extension into what is known as the Otavi Mountains (Mendelsohn et al, 2002). The geology rock type of the proposed Project area is composed mostly of dolomites and schist.

The dolomites of the Swakop/Otavi Group crop out in a series of east-west striking ridges that constitutes the Otavi Mountains. The origin of the Otavi Mountains is associated with the ancient sea between the Congo and Kalahari Cratons. Over millions of years a lime and dolomite rock mass of up to 5,000 m thick was formed, which was pressed upwards and folded intensely as the



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result of a collision between two cratons (mainlands) approximately 650 million years ago. Large-scale mining of base metals, especially copper, plays an important role in the economy of the country. Copper occurs at several locations but is dominated by the Damara deposits: Otavi Mountainland (including the defunct Tsumeb Mine) and the Swakop lithologies (mainly schist, with Matchless Amphibolite Belt of the Swakop Group) (Miller et al, 2008). The Kombat area is also known for its high base metal potential, which are mainly copper, lead, zinc, silver, and vanadium.



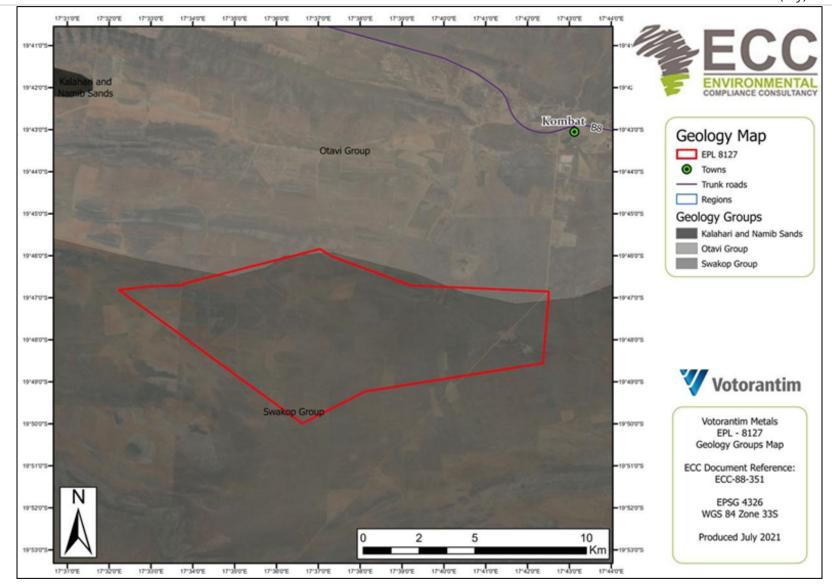


Figure 6 - EPL 8127 regional and local geology



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#### 5.3 TOPOGRAPHY AND SOIL

EPL 8127 is located at elevation 1,507 to 1,520 meters above mean sea level (Figure 7). The landscape is mostly flat with some sharp topographical contrasts. Generally, there is a rise in elevation from west to east and from north to south, with the highest readings to the northwest of the EPL.

The Vertic Cambisols is the dominant soil type near the mountainous and northwest of the EPL. Cambisols are characterized by the absence of a layer of accumulated clay, humus, and soluble salts. Therefore, these soils are recent and the parent material is only slightly weathered. They are fairly fertile, these soils have a good water-holding capacity and internal drainage (Mendelsohn et al, 2002). Although fine and silty, the soil occasionally contains coarse, medium, and fine grained sub-rounded calcrete nodules. The sources of dust associated with the proposed exploration activities are land clearing and creation of access roads. The Kombat area lithology consists mainly of sandstone, quartzite, limestone, dolomite (Christelis and Struckmeier, 2001).



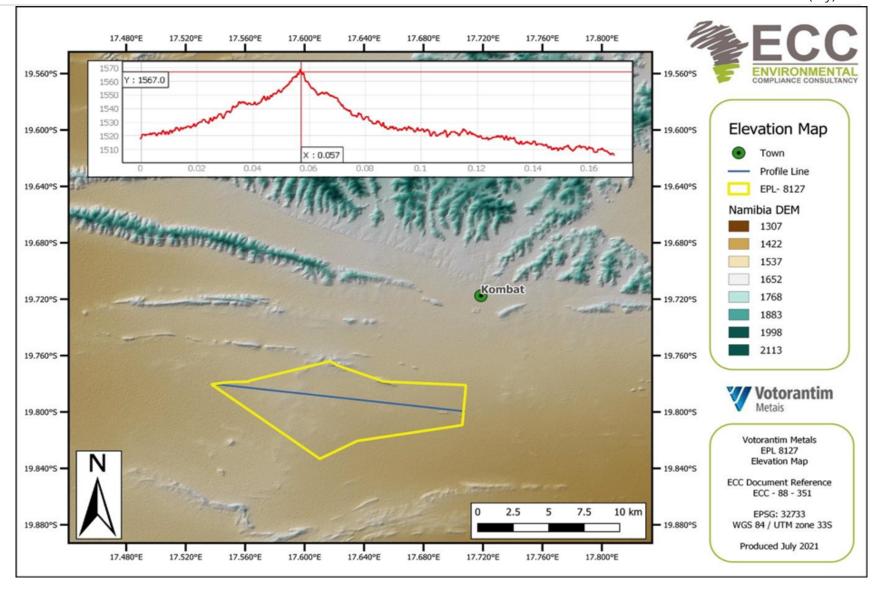


Figure 7 - Elevation profile along 8127



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EPL 8127 is largely covered by the regosol soil group (Figure 8). Regosols are medium- or fine textured soils of actively eroding landscapes. They form thin layers lying directly above the rock surface from which they are formed. The central regions of the country are dominated by regosols, which are especially susceptible to erosion where there is any degree of slope. Vegetation cover on these thin soils is generally sparse because they cannot provide most plants with sufficient water or nutrients. Areas with regosols can support low-density stock farming or wildlife (Mendelsohn et al, 2002).





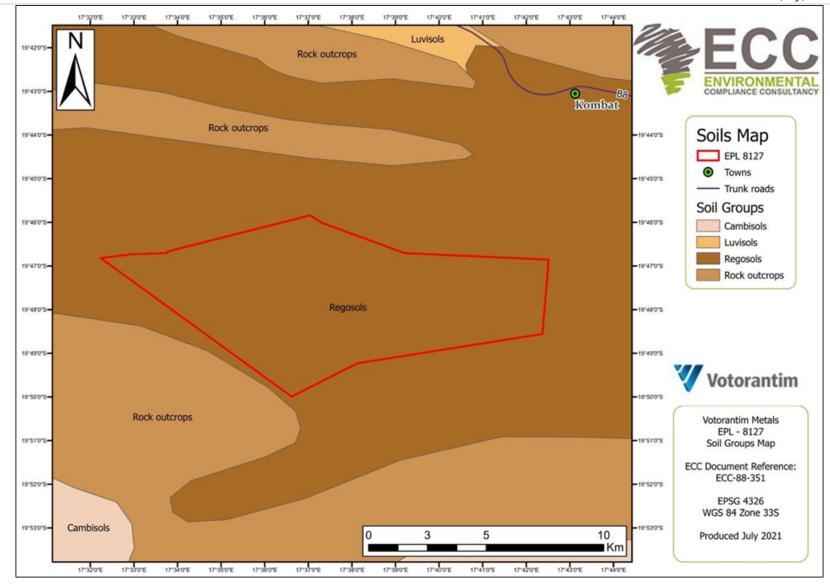


Figure 8 - EPL 8127 regional and local soil map



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#### 5.4 HYDROLOGY

The Otavi Mountains form part of a karst landscape, which means that well-defined surface drainage systems are absent, or follow only short distances before surface water penetrates the surface. Although a drainage pattern can be identified, the flow of surface water is more defined by topographical valleys than the presence of streambeds. Many karst features occur in the Otavi Mountain Lands due to the dissolution of limestone and dolomite along joints and fractures that have provided a passage for water. Dissolution features can result in springs, where an underground "stream" intersects the ground surface, and caves.

The Kombat mine which is within the Otavi Mountains via the Grootfontein - Omatako Canal supplies dolomite groundwater to the Okakarara treatment plant, as part of the Eastern National Water Carrier (ENWC). The Kombat area aquifers and aquitards hydrogeological character is characterized as Mulden Group Aquitard which are fractured and partly confined. The groundwater quality and vulnerability is saline to slightly brackish at shallow depth (Christelis and Struckmeier, 2001).

#### 5.4.1 GROUNDWATER

Some of the groundwater abstracted from the mine at Kombat is purified for drinking water purposes. The water, regularly tested by NamWater, is suitable for drinking. The groundwater is sufficiently buffered to prevent heavy metals from the mines dissolving to any harmful extent despite the relatively high proportion of oxidised ore (Christelis and Struckmeier, 2001). The farms located within and nearby EPL 8127 obtain water from borehole abstraction. There are more than 10 boreholes within the EPL 8127 area. It is assumed that water will be obtained from some of these existing boreholes during the exploration activities. Considering the nature and scale of the proposed exploration, drilling is unlikely to impact groundwater. There is no water shortage around the Project area, however, should the Project require the drilling and abstraction of water from an additional borehole, an application must be submitted to the MAWLR.

#### 5.4.2 GROUNDWATER FLOW

EPL 8127 is located mainly in the Kunene South Groundwater Basin (Figure 9). Groundwater flow in the area is along fractures and contact zones within hard rock formations. Groundwater in the area flows in a northwesterly direction as inferred from historical groundwater data (Christelis and Struckmeier, 2001). The area is underlain by dolomites, which show a high potential of groundwater with an increased potential where fractures and faults occur on a local scale. The aquifer is reliable, as it is frequently recharged and water quality is generally of a high standard (Mendelsohn et al., 2002).



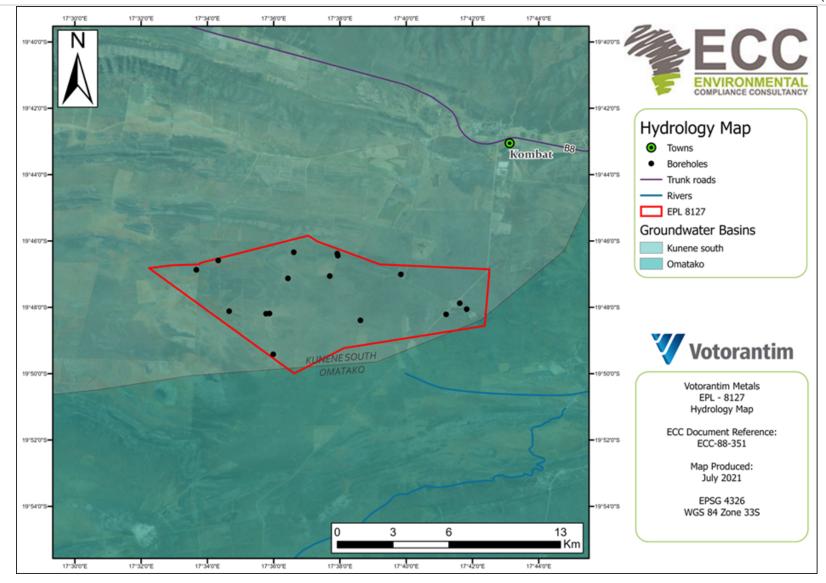


Figure 9 - Hydrology map of the EPL 8127



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#### 5.5 BIODIVERSITY

#### 5.5.1 VEGETATION

The EPL area is covered by the Thornbush shrubland vegetation type (Figure 10). It is broadly classified as a dense shrubland vegetation structure, with vegetation dominated by relatively dense stands of woody shrubs and trees. In some places plant growth becomes progressively shrubby, especially where the soils are shallower, slopes are steeper and where it is hillier and rockier. Most of the woody vegetation varies between one and three metres in height. Thorny Acacia species dominate but several species are closely associated with the higher elevations only. Thornbush thickets dominate on the sandy parts and calcrete-rocky parts (Mendelsohn et al, 2002).

A variety of savanna type vegetation covers most of the Namibian lands, of which the thornbush and mountain savannahs are the most dominant ones to occur in the central highlands. Less water infiltrates during the growing season when vegetation cover is denser and plants take up water for growth and transpiration Christelis and Struckmeier, 2001). Grazing resources are made up of a wide variety of grass species, which vary widely in palatability and in their abundance. Large parts of the farmland on and around EPL 8127 are marked by bush encroachment, mainly as a result of long continuous periods of selective grazing by livestock. The encroachment has led to a decreased carrying capacity on many farms and the invader bush is managed in several ways as a result, one of which is the production of charcoal for export.

Plant diversity is estimated at >500 species (Mendelsohn et al, 2002), although local differentiation as a result of topography and the availability of water is possible. This is the highest occurrence of plant diversity in Namibia. Biophysical baseline information does not accentuate the uniqueness of mountain vegetation suggesting the diversity of plant species may be restricted to relatively small areas in which there are several habitats and niches offered by micro-climate, elevation, and sheltered spaces.



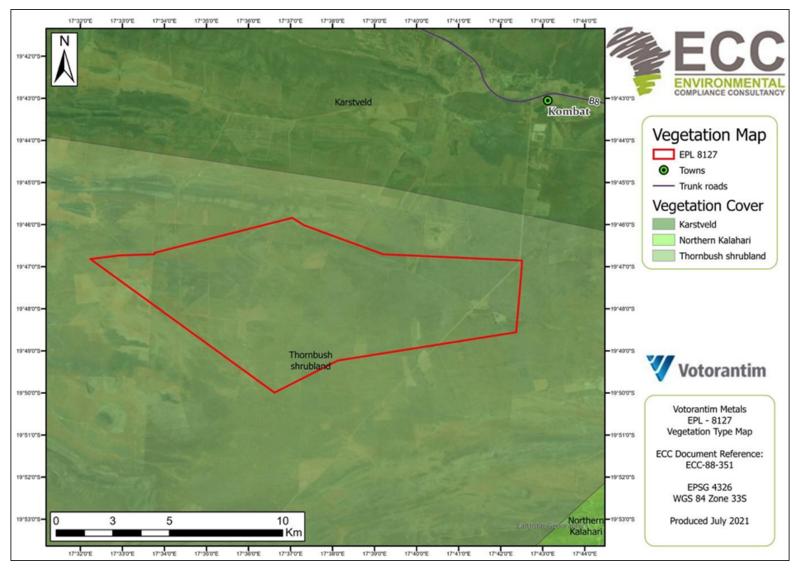


Figure 10 - EPL 8127 regional and local vegetation map



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#### 5.5.2 FAUNA SPECIES

Overall terrestrial biodiversity of the Otavi Mountains ranges from medium to high. The number of mammal species ranges between 61 and 75, the number of bird species is between 201 and 230, with 71 – 80 reptile species, 12 – 15 frog species and 10 – 11 scorpion species that could be expected (Mendelsohn et al, 2002). High bird diversity reflects the presence of a greater range of habitats compared with surrounding areas. The vegetation of the Otavi Mountains in combination with the higher elevation support many birds that are absent from the surroundings. On a local scale it is expected that diversity increases with the increase in habitats, which is closely coupled to shelter, food and water availability and migration routes. The micro-climate associated with an increase in elevation plays a prominent role in this regard and is directly related to the increase in terrestrial diversity, and the relative abundance of water in the area.

The dominant land use within and on the surroundings of the EPL is extensive agriculture, in particular large livestock farming and to a lesser degree crop production. For crop production some farmers apply irrigation, mainly to produce fresh vegetables, while some farmers rely on the higher rainfall to produce maize.

#### 5.6 SOCIO-ECONOMIC BASELINE

The Otjozondjupa Region where EPL 8127 is located, is one of the bigger region of Namibia and is located in the northern half of the country, bordering the Khomas and Omaheke regions in the south, the Erongo and Kunene regions in the west and the Oshikoto, Kavango-West and Kavango-East regions in the north. In the east the region stretches along the international border with Botswana. The area is well-known for the Waterberg Plateau Park and cattle farming activities.

#### 5.6.1 DEMOGRAPHIC PROFILE

Namibia is one of the least densely populated countries in the world (2.8 persons per km2). Vast areas of Namibia are without people, in contrast to some fairly dense concentrations, such as the central-north and along the Kavango River. Windhoek, the capital, functions as a primate city – not only is it the urban area with the biggest population, but the concentration of private and public head offices attracts Namibians from all parts of the country in search for a better life. National population growth rate is estimated at less than 2%, lower than most African countries. Namibia's population is young - although 57% falls in the age group 15 – 59, 37% of the total population is younger than 15 (NSA, 2017). Since 2005 there has been a steady improvement in life expectancy, currently estimated at 65 years. In 2018 it was estimated that 50% of all Namibians are urbanized, in other words living in an urban settlement (retrieved from <a href="https://www.worldpopulationreview.com">www.worldpopulationreview.com</a>). The last national census was conducted in 2011 and counted 2.1 million Namibians. An intercensal demographic survey was conducted in 2016 and estimated the total population at 2.3 million (NSA, 2017).



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The population density of the Otjozondjupa Region is low (1.5 persons per km2) when compared to the national average, and the current total population of the region was estimated at 154,342 in 2016 (NSA, 2017). In 2011 the population of Otjiwarongo was 28,249 and with a generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 40,200 residents. Otavi is smaller, recording only 5,200 residents in 2011 and an estimated population of 7,400 in 2020. Grootfontein had a population of 23,793 in 2011 and with the generalized urbanization growth rate of 4.0% the current estimated population is estimated to be 33,864 residents. Kombat, at its peak, had over 1,000 residents. The settlement was almost abandoned when mining operations ceased, however due to the functional services which include a primary school, clinic, police station, a nursing training centre and postal office, the livelihood of the settlement remained at bay.

### 5.6.2 GOVERNANCE

Namibia is divided in 14 regions, subdivided by 121 constituencies. Otjozondjupa Region is divided into seven constituencies. Each region has a regional council, elected during regional elections per constituency.

The population density of the Otjozondjupa Region is much lower than the national average and the current total population of the region is Project ed at 160,100 (retrieved from www.citypopulation.de). Otjiwarongo is the capital and also the largest town of the Otjozondjupa Region. Many of the region's head offices are located in the town. Other towns of the region are Grootfontein, Otavi, and Okakarara.

Ordinarily in Namibia the management of towns falls under the jurisdiction of national, regional, or local government authorities in the form of municipalities. However, for some mining towns it is different. Relevant to EPL 8127 the closest community, which is Otavi, is governed through a local authority. Otavi is governed by a town council, its economy relies on small businesses and many surrounding game/cattle farms, as well as on visitors passing through to the northern and southern parts of the country. While Kombat has historically been under private administration of the respective mine owners. The owners provide basic necessities for residents of the Town. These include housing, transport, medical service, and recreation. Some nearby tourism attractions include the Gaub Caves and the Hoba Meteorite, which will not be affected by exploration activities (Info-Namibia, 2020).

#### 5.6.3 HEALTH

Since independence in 1990, the health status of Namibia has increased steadily with a remarkable improvement in access to primary health facilities and medical infrastructure. Despite the progress, the World Health Organization (WHO) in 2015 recommended strategic priorities of the health system in Namibia which include improved governance, an improved health information system, emergency preparedness, risk reduction and response, preventative health care and the combating of HIV/AIDS and TB (WHO, 2016).



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HIV/AIDS remains a major reason for low life expectancy and is one of the leading causes of death in Namibia. There is a high HIV prevalence among the whole population, but since the peak in 2002 (15,000 new cases of HIV per year, and 10,000 yearly deaths due to AIDS) the epidemic started to stabilise (UNICEF, 2011). Although new infections as well as fatalities halved during the next decade, life expectancy for females returned to pre-independence levels but for males it did not reach pre-independence levels yet. HIV/AIDS remains the leading cause of death and premature mortality for all ages, killing up to half of all males and females aged 40 - 44 years in 2013 (IHME, 2016).

Tuberculosis (TB) is a leading killer of people infected by HIV/AIDS, and Namibia has a high burden – in 2018, 35% of people notified with TB were infected with HIV. The country is included among the top 30 high-burden TB countries in the world, with an estimated incidence rate of 423 per 100,000 people and 60 fatalities per 100,000 people in 2018 (retrieved from <a href="https://www.mhss.gov.na">www.mhss.gov.na</a>).

Over the period 2000 – 2013 significant rises were observed for stroke, ischemic heart diseases, diabetes, and depressive disorders, but HIV/AIDS remained the top cause of premature mortality. Over the same period significant decreases were observed for diarrheal diseases, neonatal conditions, and malaria. Risk factors are key drivers of premature mortality, and social ills were identified as the leading factor for death – particularly unsafe sex and alcohol and drug abuse. TB and malaria are compounded by the AIDS epidemic, and the risk of contracting malaria and TB is 15% greater if a person is also infected with HIV, with a risk of 50% higher to die as a result (IHME, 2016).

As of the beginning of 2020 the coronavirus disease (COVID-19), a communicable respiratory disease, has caused illness in humans at a pandemic scale and has resulted in an increasing number of deaths worldwide. The viral outbreak is adversely affecting various socio-economic activities globally, and with reports of the increasing number of people testing positive, it is anticipated that this may have significant impacts on the operations of various economic sectors in Namibia too. The disease caused many countries to enter a state of emergency and lockdown mode, with dire economic consequences.



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#### 5.6.4 EMPLOYMENT

Otjozondjupa labour force participation rate was more than 76.8%, compared to the average of 71.2% for Namibia. More than half of the people were employed in the private sector and about one-quarter by the State. Agriculture is the economic sector with the most employees – about 30%, while 40% of those employed fell in the occupational group of general labourers and other unskilled occupations. Wages and salaries represented the income source of 61.7% of households (NSA, 2018). The whole region was marked by low education levels, which affected employability and prevented many households from earning a decent income. More than 60% of the population is over 15 years of age and about one-third of the total population can be regarded as part of the labour force.

The unemployment rates in Namibia, particularly among the youth are high. According to the Namibia Labour Survey (2018), the unemployment rate of the Otjozondjupa Region was 36.1%, while the unemployment rate for people between 15 and 34 years of age was 47.4% in 2018, slightly higher than the national average of 46.1% (Namibian Statistics Agency, 2018).

In 2018, 53.4% of all working Namibians were employed in the private sector and 21.5% by the state. State-owned enterprises employ 7.6% Namibians and private individuals 16.6%. Wages and salaries represented the main income source of 47.4% of households in Namibia. Agriculture (combined with forestry and fishing) is the economic sector with the most employees – 23% of all employed persons in Namibia work in this sector. Agriculture is also the sector that employs the most informal workers in Namibia, calculated at 87.6%. Wages of employees in the agriculture sector are lower than all other sectors except for workers in accommodation and food services and domestic work in private households (NSA, 2019).

Low education levels affect employability and prevent many households from earning a decent income. Of all people employed in Namibia, 63.5% are qualified to lower than junior secondary level (Grade 10 and lower). In total 11.8% of all people employed had no formal education. In total 29.1% of all people employed fall in the category "elementary occupation" and 15.2% in the category "skilled agriculture" (NSA, 2019).

Overall, the rate of unemployment is estimated at 33.4% for Namibia, using the broad definition of unemployment. More than 60% of the population is over 15 years of age and about one-third of the total population can be regarded as part of the labour force. The unemployment rate in rural and urban areas is almost the same – 33.4% in urban areas and 33.5% in rural areas. The highest unemployment rates are found amongst persons with education levels lower than junior secondary. The unemployment rate of persons with no formal education is 28.6%, with primary education 34.6% and with junior secondary education 32.7% (NSA, 2019).



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#### 5.6.5 ECONOMIC ACTIVITIES

The economy of the Otjozondjupa Region is predominantly agriculture-based. Extensive livestock farming forms the livelihood of many people and is one of the reasons for the low intensity land use over much of the 105,460 km2 the region covers, the total low population of (154 342 in 2016) as well as the low population density (about 1.5 persons per km2). Large parts of the region are covered by commercial and communal farms, mainly for cattle ranching. Guest farms and hunting farms are also common.

On both commercial and communal land, bush encroachment decreased the carrying capacity of the farms markedly over the last four decades. The invader bush is managed in several ways, one of which is the production of charcoal for export.

Mining plays a pivotal role in the economy of Namibia. Since independence, it has consistently been the biggest contributor to Namibia's economy in terms of revenue and accounts for 25% of the country's income. Mining is one of the main contributors to GDP, and one of the largest economic sectors of Namibia. The main commodities are uranium, gold, diamonds, copper, zinc, lead, salt and dimension stone. Also, a major employer, about 1.7% of the formal labour force of Namibia is directly employed by the mining sector.

Employees in mining receive the highest wages by industry (NSA, 2019). The multiplying effect of income from employment in the mining sector is also significant – not only is it estimated that each employed person provides for four other persons, but the mining industry contributes in various ways to the national economy by means of taxes and royalties, a strong service-support base and specialized contractors. Several mining activities emerged in the Otjozondjupa Region during the last decade and had a strong influence on the regional demography and economy – not only as a result of the establishment of the Otjikoto Gold Mine of B2Gold between Otavi and Otjiwarongo, but also as a result of other mining Project's such as Okoruso, Okanjande, the Whale Rock cement factory of Cheetah Cement near Otjiwarongo and Ohorongo Cement near Otavi. In Tsumeb the smelter of Dundee Precious Metals Tsumeb (Pty) Ltd is also an influencer in the sector.

Several new government offices have been established in Otjiwarongo town as the regional capital. Other factors that influenced the socio-economy of the region, is the continuous growth of the tourism industry as well as the growing importance of the charcoal industry. Combined, all these factors had a cumulative role in the changing land use patterns and socio-economic landscape of the region (and the nearby towns and communities), which can only be quantified when comparisons from the next national census with the 2011 census are possible.

Since 2016, Namibia has recorded slow economic growth, registering an estimated growth of only 1.1% in 2016. The primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third quarters respectively (NSA, 2019). Despite the more positive expectations, the economy retracted to an average growth of not more than 1% annually since 2017.



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#### 5.6.6 CULTURAL HERITAGE

In Namibia several mountains are closely coupled to heritage values, and it is possible that this applies to the Otavi Mountains as well. For many years the mineral deposits of the mountains were known, and copper was mined at Kombat. It is possible that the mountains were inhabited or visited before the times of recorded history, simply based on the significance of its known mineral deposits. In addition, the Otavi Mountains are known for the occurrence of fossils, which makes it possible that more of these sites may be discovered.

A review of the National Heritage Council database was conducted, and no known heritage sites were identified on EPL 8127. In cases where heritage sites are discovered the "chance find" procedure will be used.

If any historical or heritage sites(s) of importance on or around the Project area are encountered during exploration activities these will be reported to the Monument's Council in Windhoek, and the site will be left untouched.

#### 5.6.7 NOISE AND SENSE OF PLACE

EPL 8127 is located where the predominant land use is extensive subsistence farming with the only signs of human influence is in the form of agricultural infrastructure, i.e. water installations, fences, tracks and buildings. Sensitive receptors associated with the EPL area may include farm owners and farm workers, visitors and tourists and neighbours.

The naturalness of the area can be disrupted by the combined and amplified effects of exploration activities – in the form of noise, dust, movements of heavy machinery, landscape scars and visual obtrusions. This may alter and affect the lifestyle of receptors, although the exploration activities are short-term and reversible.

EPL 8127 lies over 8 farms, and it is likely that the noise from the increased movement of people in the area will become a nuisance to farmers / residents of the area. The Proponent will continue to communicate with the farm owners, should this be a pertaining issue, and further mitigation measures shall be applied.

Additionally, work will be planned in advance and an agreement will be met with the farm owners on the most suitable timing of work and amelioration noise during drilling activities.



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### **6 IDENTIFICATION AND EVALUATION OF IMPACTS**

The key stage of the EIA process is the impact prediction and evaluation stage. This stage is the process of bringing together Project characteristics with the baseline environmental characteristics and ensuring all potentially significant environmental and social impacts are identified and assessed. Impact prediction and evaluation involve envisaging the possible changes to the environment as a result of the proposed Project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The assessment considers all stages of the Project 's life cycle that is scoped into the assessment and is presented in this report. It is an iterative process that commences at Project inception and runs through to the final design and Project implementation (exploration). The impact prediction and evaluation stage were undertaken in September 2021 and the findings of the assessment are presented in this document.

#### 6.1 Introduction

Chapter 2 provides an overview of the approach used in this EIA process and details each of the steps undertaken to date. Predication and evaluation of impacts is a key step in the EIA process. This chapter outlines the methods followed to identify and evaluate the impacts arising from the proposed Project. The findings of the assessment are presented in this chapter.

This chapter provides the following:

- Details on the assessment guidance used to assess impacts;
- Lists the limitations, uncertainties and assumptions with regards to the assessment methodology;
- Details how impacts were identified and evaluated, and how the level of significance was derived; and
- Details how mitigation was applied in the assessment and how additional mitigation was identified.



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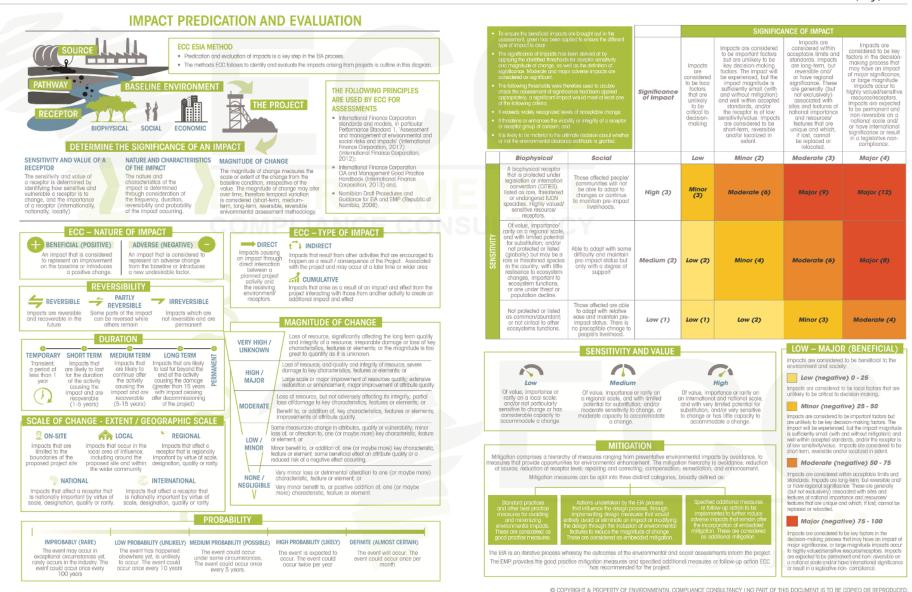


Figure 11 - ECC's impact prediction and evaluation process

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### 6.2 IMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The following limitations and uncertainties associated with the assessment methodology were observed:

- Topic specific assessment guidance has not been developed in Namibia. A generic
  assessment methodology was applied to all topics using IFC guidance and professional
  judgement;
- Guidance for CIA has not been developed in Namibia, and a single accepted state of global practice has been established. The IFC's guidance document (International Finance Corporation, 2013) has been used for the CIA.

Several limitations and uncertainties were acknowledged during the ESIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 8 contains the assumptions and uncertainties identified during the assessment process.

Where uncertainties exist, a cautious approach has been applied, allowing the worst-case scenario for potential impacts to be identified. Where limitations and uncertainties exist, assumptions have been made and applied during the assessment process.

Table 8 - Limitations, uncertainties, and assumptions

Limitation / uncertainty	Assumption		
Number of access roads and	The making of new tracks or access roads will be avoided, and		
temporary drill campsites	existing tracks and routes will be used as far as possible. While		
	every effort will be made to minimize environmental damage, in		
	some cases it will be necessary to clear some bush to create small		
	roads, which may be required for equipment to reach the site and		
	for temporary campsites. If needed, cut lines have to be created		
	by clearing of vegetation to have access to some parts of the EPL.		
The program of exploration	It is assumed that exploration work shall take a couple of months		
works is not confirmed	with two-to-three-week sampling Project as at different times on		
	different sites and with follow-up exploration drilling Project s		
	possible. Activities involve drilling; aerial or remote sensing;		
	geophysical surveys; and mineral sampling. Pitting and trenching		
	are unlikely.		
Number of workers, area	It is planned that approximately four to eight people will be		
they will come from and	contracted for the proposed Project . Most of the employees will		
accommodation	stay in Otavi; contractors may camp on exploration sites / farms,		
	depending on approval of farm owners.		



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# 7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES

This section sets out the overall approach that was adopted to assess the potential environmental and social impacts associated with the Project. To fully understand the significance of each of the potential impacts, each impact must be evaluated and assessed.

#### 7.1 Scoping assessment findings

When undertaking the scoping exercise, the design of the proposed Project and best practice measures were considered to ensure the likely significant effects and any required additional mitigation measures were identified. A summary of the potential impacts and mitigation and/or control measures are discussed below. The following topics were considered during the scoping phase:

- Surface water and groundwater;
- Soils and topography;
- Landscape (visual impacts, sense of place);
- Socioeconomics (employment, demographics, and land-use);
- Noise;
- Ecology (fauna and flora);
- Air quality (emissions, pollutants, and dust); and
- Cultural heritage.

Table 9 sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and / or receptor has not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

Due to the nature and localised scale of the exploration activities, and the environmental context of the site, the potential environmental and social effects are limited and unlikely to be significant. The only area where uncertainty remained during the scoping phase was the potential effects on human receptors from the increase in noise levels and visual impacts, namely residents in the near farmhouses. Further consideration of the potential effects on humans was therefore undertaken and results are presented in the next section.



### Table 9 - Scoping assessment findings and proposed mitigation measures

DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
Site operations such as maintenance activities, loss of containment, accidental fuel / hydraulic fluid leaks and spills, or similar sources.	Groundwater quality	Hydrocarbon leaks and spills could enter the aquifer causing contamination.	Adverse Direct Reversible Moderate Short term On-site Likely	Medium	Moderate	Moderate (6)	<ul> <li>Good housekeeping</li> <li>Training through toolbox talks and induction</li> <li>All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil</li> <li>Spill kits and absorption material available during fuel delivery, storage or use</li> <li>Accidental spills and leaks (including absorption material) to be cleaned as soon as possible</li> <li>Major spills to be reported, also to the authorities</li> <li>Maintenance and service schedules on equipment is in place</li> <li>Store bulk fuel in adequate containment areas (nonporous surface, bunded)</li> <li>No damaged containers in use</li> <li>Preventative measures will be in place when service</li> </ul>	Minor (4)

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DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
							<ul> <li>and maintenance activities</li> <li>are done (drip trays, non-porous surfaces, funnels, non-damaged containers)</li> <li>Refuelling will be done in areas with adequate preventative measures in place</li> </ul>	
Potential spillages of drill fluid, lubrication, etc. or drilling that penetrate the groundwater table.	Groundwater quality	Hydrocarbon leaks and spills could enter the aquifer causing contamination.	Adverse Indirect Reversible Moderate Short term Regional Likely	Medium	Moderate	Moderate (6)	<ul> <li>Ensure drill pads and spill kits are in place</li> <li>Consider alternative sites when water table is too high</li> <li>Drill system should be dug to direct any accidental spills into sumps</li> <li>Extraction volumes of water shall be minimal during exploration and where possible, water from existing water sources shall be used</li> </ul>	Minor (4)
Discharge and infiltration of non-contained wastewater	Water	Wastewater can contaminate surface and groundwater	Adverse Direct Partly Reversible Moderate Short term	Medium	Minor	Minor (4)	<ul> <li>Wastewater discharges will be contained</li> <li>Workers will be made aware about the importance of wastewater management</li> <li>Good housekeeping</li> </ul>	Low (1)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
			Regional Unlikely					
Inadequate management of waste	Water	Waste items and litter can pollute drainage channels	Adverse Cumulative Reversible Moderate Temporary On-site Unlikely	Medium	Minor	Minor (4)	<ul> <li>Good housekeeping</li> <li>Training and awareness through toolbox talks and induction</li> <li>Implement a Standard Operational Procedure on waste management, for all kinds of waste possible onsite (e.g. domestic, mineral, hydrocarbons, hazardous, etc.)</li> <li>Raise awareness about the importance of responsible waste management</li> <li>Implement a culture of correct waste collection, waste segregation and waste disposal</li> <li>Avoid hazardous waste on site</li> <li>Wastewater discharges will be contained – no disposal of wastewater</li> </ul>	Low (2)
Inadequate management of hazardous and	Soil	Pollution of soil	Adverse Direct Reversible Minor	Medium	Minor	Minor (4)	<ul><li>Good housekeeping</li><li>Training and awareness through toolbox talks and induction</li></ul>	Low (2)



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DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
hydrocarbon waste,			Short term On-site Possible				<ul> <li>Implement a Standard         Operational Procedure         (SOP) on waste         management, for all kinds of         waste possible on-site (e.g.         domestic, mineral,         hydrocarbons, hazardous)</li> <li>Implement a culture of         correct waste collection,         waste segregation and         waste disposal</li> </ul>	
Vegetation clearing for access routes, drill pads and temporary contractors camp	Terrestrial ecology and biodiversity	Loss / alteration of terrestrial habitats and loss of species	Adverse Direct Reversible Moderate Short term On-site Possible	Medium	Minor	Minor (4)	<ul> <li>Use existing roads for access to avoid new tracks and cut lines</li> <li>Minimise speed on farm tracks/roads</li> <li>Apply proper road maintenance periodically to roads used by removing excess loose material and rectify road defects</li> <li>Minimise clearance areas through proper planning of the exploration activities and footprints</li> <li>Should new tracks be created, this should only be done during dry conditions</li> </ul>	Low (1)

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DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
							<ul> <li>Where necessary, rescue and relocate plants of significance</li> <li>Execute revegetation of cleared areas upon completion of exploration activities</li> </ul>	
Ambient noise as a result of machinery use and movement (also through the use of airborne equipment)	Terrestrial ecology and biodiversity	Wildlife, residing and nesting organisms can be disturbed	Adverse Direct Reversible Moderate Short term On-site Likely	Medium	Moderate	Moderate (6)	<ul> <li>Restrict excessive noise to areas of activities only</li> <li>Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday)</li> <li>No activities between dusk and dawn</li> <li>Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors</li> <li>All equipment to be shut down or throttled back between periods of use,</li> <li>Respect civic aviation regulations about the use of a drone</li> <li>Movement/speed of either people or vehicles should be kept to minimum as to not</li> </ul>	Low (2)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
							disturb wildlife when present/observed	
Increased movement of machinery	Terrestrial ecology and biodiversity	Residing and nesting organisms such as reptiles can be disturbed, injured or killed	Adverse Direct Partly-reversible Moderate Short term On-site Possible	Medium	Minor	Minor (4)	<ul> <li>Restrict movements to areas of activities only</li> <li>Use existing tracks and routes only</li> <li>Identify rare, endangered, threatened and protected species in advance</li> <li>Route new tracks around protected species and sensitive areas</li> <li>Restrict movements to daytime hours</li> <li>Make workers aware and notify them on avoiding some areas</li> <li>No driving off designated access routes (into the bush) / off-road driving</li> <li>No animals or birds may be collected, caught, consumed or removed from site</li> </ul>	Low (1)
Increased disturbance of areas with natural vegetation	Terrestrial ecology and biodiversity	Alien species and weeds can be introduced to the area	Adverse Direct Reversible Minor Short term	Low	Minor	Low (2)	<ul> <li>Eradicate weeds and alien species as soon as they appear</li> <li>Make workers aware about alien species and weeds</li> </ul>	Low (1)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
			On-site Possible					
Extensive vegetation clearing	Soil	Increased exposure due to vegetation clearance can cause soil erosion	Adverse Direct Reversible Moderate Short term On-site Possible	Medium	Minor	Minor (4)	<ul> <li>Ensure erosion control and prevention measures are in place when vegetation clearance is required</li> <li>Where necessary, plan access routes, drill pads and camps outside of existing drainage lines</li> <li>Where necessary, install diversions to curb possible erosion</li> <li>Restore drainage lines when disturbed</li> </ul>	Low (2)
Drilling and the use of drilling equipment	Soil	Loss of soil quality due to mixing of earth matter, trampling and compaction	Adverse Direct Reversible Moderate Short term On-site Possible	Low	Minor	Low (2)	<ul> <li>Limit the possibility of compaction and creating of a hard subsurface</li> <li>Limit the possibility of trampling</li> <li>Topsoil should be stockpiled separately, and re-spread during rehabilitation</li> <li>During drilling oil absorbent matting should be placed under and around the rig</li> <li>Equipment must be in a good condition to ensure that accidental oil spills do</li> </ul>	Low (1)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
							not occur and contaminate soil  In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site  Limit the possibility to mix mineral waste with topsoil	
Drilling activities, movement of machinery and vehicles	Heritage	Potential damage to cultural heritage sites	Adverse Direct Partly Reversible High Permanent On-site Possible	High	Minor	Moderate (6)	<ul> <li>Implement a Chance Find Procedure</li> <li>Raise awareness about possible heritage finds</li> <li>Report all finds that could be of heritage importance</li> <li>In case archaeological remains to be uncovered, cease activities and the site manager has to assess and demarcate the area</li> <li>Project manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform ECC with GPS position</li> <li>If needed, further investigation has to be requested for a professional</li> </ul>	Minor (4)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
							assessment and the necessary protocols of the Chance Find Procedure have to be followed,  - Archaeologist will evaluate the significance of the remains and identify appropriate action, (record and remove; relocate or leave premises, depending on the nature and value of the remains are human,  - Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.	
Drilling activities, resulting into dust emissions  Windblown dust from	Community	Visual disturbance and loss of Sense of Place	Adverse Direct Reversible Moderate Temporary Local Likely	High	Minor	Moderate (6)	<ul> <li>Position drill equipment in such a way that it is out of sight from human receptors</li> <li>Apply dust suppression where possible</li> <li>Restrict speed of vehicles (&lt;30km/h)</li> </ul>	Minor (4)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
exposed/cleared land during exploration activities							<ul> <li>Specific activities that may generate dust and impact on residents shall be avoided during high wind events</li> <li>All vehicles and machinery / equipment to be shut down or throttled back between periods of use</li> <li>Barriers or fences shall be used if drilling occurs in locations that may affect residents or livestock</li> <li>Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property</li> <li>Maintain good housekeeping</li> <li>Regular and frequent engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon</li> </ul>	



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
Potential occurrences of veld fires due to uncontrolled fire set ups either by the exploration team camping on site	Infrastructure, Topography and Landscape	Possible damage and loss of property due to fire	Adverse Indirect Partially- Reversible High Temporary Onsite Unlikely	Low	Minor	Low (2)	<ul> <li>No open fires are allowed to be lit by personnel associated with the Proponent anywhere on the EPL outside of dedicated campsites;</li> <li>The Proponent to ensure that exploration campsites have proper cooking</li> </ul>	Low (1)
Potential occurrences of veld fires during high wind periods from open fires, inadequate disposal of cigarette butts, and possibly mixing of flammable material together	Terrestrial ecology and bio- diversity	Terrestrial biodiversity destruction and loss of habitant due to uncontrolled fire outbreaks	Adverse Indirect Partly Reversible Moderate Temporary Onsite Likely	Low	High	Minor (3)	facilities available to use. Gas stoves are the preferred option;  No cigarette butts are allowed to be discarded into the environment. These should be contained in appropriate domestic containment bins and disposed of at the local landfill site;  No unauthorised movement beyond the exploration areas and campsites is allowed; and Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gasbottels).	Low (2)



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DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
Exploration activities, increased movement of machinery and vehicles	Infrastructure and Resources	Constraint on resources (i.e. water) due to ongoing exploration activities Deterioration of roads due to frequent movement of machinery and vehicles on site and	Adverse Direct Reversible Moderate Temporary Onsite Possible	Medium	Minor	Minor (4)	<ul> <li>Restrict speed of vehicles         (&lt;30km/h) should be         adhered to on site.</li> <li>Designated roads and tracks         should be used.</li> <li>Consider reusing, recycling         and reducing consumption         rates to conserve resources.</li> <li>Residents shall be provided         at least two weeks' notice of         drilling operations within 1         km of their property</li> <li>Use of resources (i.e.         abstraction of water from         existing boreholes) is used         and accessed subject to         access agreements with the         landowners.</li> <li>All pumps and water flow         outlets should be properly         closed and diligently         handled.</li> </ul>	Minor (3)
Movement of vehicles, exploration activities	Community	Create conflict with farm owners and neighbours about access, leaving gates open, damage to farm tracks, suspicious	Adverse Indirect Reversible Minor Temporary On-site Likely	High	Minor	Moderate 6)	<ul> <li>Ensure documented permission to enter farms through a signed access agreement and a list of employees allowed to access the farm(s) is shared with the farmer owners.</li> </ul>	Minor (3)



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE	VALUE OF SENSITIVITY	Magnitude of change	Significanc e of impact	Impact management/control measures	Residual impact after mitigation
		movements, loss of farming area, etc.					<ul> <li>Farmers should have access to all farm areas at all times</li> <li>Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property</li> <li>Existing water points and feeding area need to be left unaffected</li> <li>Use existing roads for access, avoid new tracks / cut lines,</li> <li>Damage to any farm tracks due to the Proponent's employees or contractors will be fixed by the Proponent.</li> <li>Compliance with all applicable laws and agreements</li> <li>Frequent and regular engagement with residents to identify any concerns or issues, and mitigation and management measures agreed upon</li> </ul>	
Movement of vehicles,	Community	Presence of exploration team can be blamed for	Adverse Cumulative Reversible	Low	Low	Low (1)	Develop and implement an operation manual or procedures to work on	Low (1)



							( 3,7 = 0.0	Residual
DESCRIPTION OF	<b>D</b>	DESCRIPTION OF	EFFECT/DESCRIPTI	VALUE OF	Magnitude of	Significanc	Impact management/control	impact
ACTIVITY	RECEPTOR	IMPACT	ON OF MAGNITUDE	SENSITIVITY	change	e of impact	measures	after
								mitigation
ovaloration		stock theft and	Minor				private farms and	
exploration activities		poaching					implement monitoring	
activities		poacriirig	Temporary Local					
			Unlikely				programmes thereafter	
			Offlikely				- Maintain frequent and	
							regular engagement with residents to identify any	
							concerns or issues, and	
							appropriate mitigation and	
							management measures	
							agreed upon	
							Ensure appropriate	
							supervision of all activities	
							Raise awareness (through	
							interactive training sessions)	
							and sensitize employees	
							about contentious issues	
							such as stock theft and	
							poaching	
							Accidents and incidents	
							need to be reported to	
							Project manager and	
							recorded in incident register	
			D C				_	
		Triggers job	Beneficial				Maximize local employment	
		creation, skills	Direct Reversible				- As far as possible promote	
Exploration	Community	development and	Minor	Medium	Low	Low (2)	local procurement	Low
activities		opportunities for	Short term				Enhance development of	beneficial
		the local economy	Local				local skills where possible	
			Possible				' '	
			L 022INIG					



DESCRIPTION OF ACTIVITY	RECEPTOR	DESCRIPTION OF IMPACT	EFFECT/DESCRIPTI ON OF MAGNITUDE		Significanc e of impact	Impact management/control measures	Residual impact after mitigation
						<ul> <li>Develop and use fair, inclusive, and transparent hiring practices to avoid conflict over jobs.</li> </ul>	



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# 7.1.1 FURTHER CONSIDERATION: NOISE AND VISUAL IMPACTS AND POTENTIAL CONFLICT WITH LANDOWNERS

Exploration and mining activities have the potential to disrupt the sense of place, a collective term to describe the special and uniqueness of an area, mostly through the amplifying effects of noise, dust, machinery movements, and visual intrusion. Collectively, the activities have a negative impact on the naturalness of the landscape with the result to temporarily alter and affect the lifestyles of receptors (neighbours, farm owners, tourists). Such disturbances brought about by exploration activities are often-short term and reversible. For the duration of the proposed Project, engagement with the affected parties and key stakeholders is critical and shall be maintained. In the event where the drill site is located in proximity to the receptors, measures will be taken to reduce the visual impacts.

Through the identification and evaluation of impacts the conclusion of the assessment is that with mitigation included in the EMP, the significance of effect is expected to be minor. No additional studies are considered necessary to further assess this impact.

**Table 10 - Summary of effects** 

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
Placement and operations of heavy machinery and drill rigs, equipment and the creation of laydown areas on site	Neighbours / land owners / tourists	Visual impacts (obscure views, create visual contrast, dust, intrusive objects), movement of heavy machinery, nuisance (noise), loss of naturalness	Adverse Direct Reversible Local / on- site Short term Certain	Medium	Minor	Minor Adverse
Movement of vehicles, exploration activities and increased movement of the exploration team in the area	Neighbours / land owners	Create conflict with farm owners and neighbours about access, leaving gates open, suspicious movements, loss of farming area, etc.	Adverse Indirect Reversible Minor Temporary On-site Likely	Medium	Moderate	Moderate Adverse

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The following additional mitigation measures have been identified in addition to those presented in the EMP and shall be communicated to the Proponent to ensure environmental effects are minimised as reasonably practicable:

- Landowners and neighbors should be engaged prior to the commencement of the exploration activities and land access agreements should be negotiated and agreed upon
- Reasonable time frames for duty will be put in place i.e. no drilling when it is dark
- Site notice of Project will be available at the site during the course of the proposed Project
- Adequate procedures for drilling activities will be encouraged i.e. no hammering of drill rods with steel hammers
- Drill equipment shall be suitably positioned to ensure that noisy equipment is as far away from human receptors as possible
- Noise suppression measures shall be applied by all drilling staff (e.g. earmuffs are mandatory) and if drilling occurs in locations that may affect residents
- Residents shall be provided at least two weeks' notice of drilling operations within 1km of their property, and
- The Proponent shall undertake frequent and regular continual engagement with residents.

The potential impact therefore is not considered significant as it does not exceed widely recognised levels of acceptable change; does not threaten the integrity of the receptors, nor is it material to the decision-making.



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### 8 ENVIRONMENTAL MANAGEMENT PLAN

The EMP for the proposed Project is presented in Appendix A. It provides management options to ensure the impacts of the proposed Project are minimised. An EMP is a tool used to take proactive action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

The management measures should be adhered to during all stages of the exploration activities. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally responsible manner. An induction should be used to familiarize all involved prior to starting their activity, supported with daily toolbox safety and environment talks, and checked with daily inspections by a competent person.

#### The objectives of the EMP are:

- To include all components of the development and operations of the Project;
- To prescribe the best practicable control methods to prevent and mitigate the environmental impacts associated with the Project;
- To monitor and audit the performance of operational personnel in applying such controls;
   and
- To ensure that appropriate environmental training is provided to responsible operational personnel.



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### 9 CONCLUSION

ECC's EIA methodology was used to undertake the environmental assessment for the proposed Project to identify if there is potential for significant effects to occur as a result of the proposed Project. Through the scoping process, the identified risks were the potential visual impacts and noise levels to increase thereby impacting human receptors in the area, additionally, conflict with landowners was assessed to be likely and of moderate significance, however these impacts can be managed and mitigated through frequent and prior notices and communications. All other social and environmental receptors which were scoped as significant effects, were unlikely and therefore no further assessment was deemed necessary. Through this scoping study and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on humans from noise impacts is expected to be minor and prior awareness and communication about the Project shall be conducted. Various best practice and mitigation measures have been identified to avoid and reduce effects as far as reasonably practicable, as well as ensure the environment is protected and unforeseen effects and environmental disturbances are avoided.



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Votorantim Metals (Pty) Ltd

# **APPENDIX A - EMP**















ECC-88-351-REP-07-D

# **ENVIRONMENTAL MANAGEMENT PLAN**

EXPLORATION ACTIVITIES ON EPL 8127
FOR BASE AND RARE METALS, INDUSTRIAL MINERALS AND PRECIOUS METALS,
OTJOZONDJUPA REGION

PREPARED FOR VOTORANTIM METALS NAMIBIA (PTY) LTD



March 2022



**Project Name:** 

#### TITLE AND APPROVAL PAGE

Environmental Management Plan for exploration activities on EPL 8127

for base and rare Metals, industrial minerals, and precious metals, in

the Otjozondjupa Region.

**Project Number:** ECC-88-351-REP-07-D

Client Name: Votorantim Metals Namibia (Pty) Ltd

Ministry Reference: APP-002822

**Status of Report** Final for Government Submission

Date of issue: March 2022

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Please note at ECC we care about lessening our footprint on the environment; therefore all documents are printed double sided.



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# **DEFINITIONS AND ABBREVIATIONS**

ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
EPL	Exclusive Prospecting Licence
MEFT	Ministry of Environment, Forestry and Tourism



#### 1 INTRODUCTION

#### 1.1 BACKGROUND TO THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent (Votorantim Metals Namibia (Pty) Ltd) to undertake an Environmental and Social Impact Assessment (ESIA) and develop an Environmental Management Plan (EMP) in compliance with and as required by the Environmental Management Act, No. 7 of 2007 and its regulations. An application for an environmental clearance will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and the Ministry of Environment, Forestry and Tourism (MEFT).

Votorantim is a large international group who undertakes mineral exploration activities in Namibia. The proposed low impact exploration activities will be undertaken on EPL 8127 for base and rare metals, industrial minerals, and precious metals. The proposed project area lies within the Otjozondjupa Region. The proposed project area can be accessed via the B8 road, east of Otavi and via the D2806 road southwest of Kombat (Figure 1).

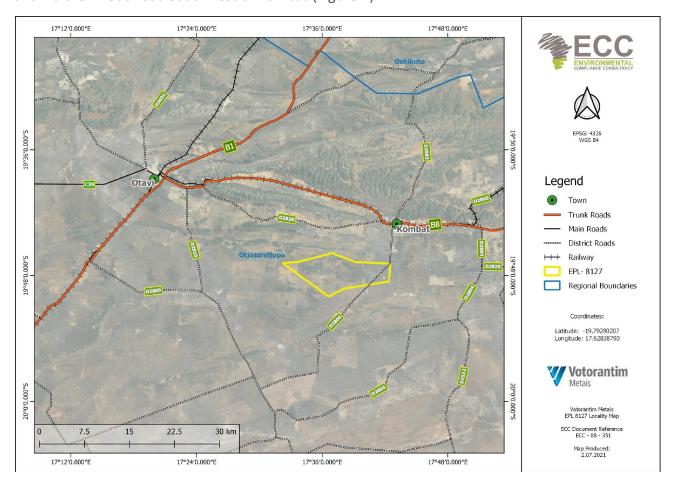


FIGURE 1 - LOCATION OF EPL 8127



#### 1.2 Environmental Regulatory Requirements

The proposed project is considered as a listed activity as stipulated in the Environmental Management Act, No. 7 of 2007 and the Environmental Impact Assessment Regulation, No. 30 of 2012. As a listed activity an application for an environmental clearance certificate is required. An Environmental Scoping Report and EMP are required as part of the environmental clearance certificate application, to support the decision-making process. This report presents the EMP and has been undertaken in accordance with the requirements of the Environmental Management Act, No. 7 of 2007 and its regulations.

#### 1.3 Purpose and Scope of this Report

This EMP provides a logical framework, proposed mitigation measures and management strategies for the exploration activities associated with the proposed project to ensure potential environmental and social impacts are mitigated and minimised as far as practically possible and to ensure that statutory and other legal obligations are adhered to and fulfilled. Outlined in the EMP are the protocols, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

This EMP forms an appendix to the environmental scoping report and is based on the findings of the assessment; therefore, the environmental scoping report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, and / or updated when the scope of works alters, or when further data / information can be added. All personnel working on the project will be legally required to comply with the standards set out in this EMP.

The scope of this EMP includes all activities carried out during the exploration stage in search of base and rare metals, industrial minerals, precious metals and semi-precious stones on EPL 8127.

#### 1.4 Management of this EMP

The proponent, Votorantim Metals Namibia (Pty) Ltd, will hold the environmental clearance certificate for the proposed project and shall be responsible for the implementation and management of this EMP. Prior to the exploration activities, this EMP shall be reviewed, amended as required and approved for implementation. The implementation and management of this EMP and thus the monitoring of compliance shall be undertaken through daily duties and activities as well as monthly inspections.

This EMP shall be circulated to all contractors and made available on ECC's website.

#### 1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the safety management plan to be developed by the proponent.

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Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines and relevant laws), the contract and statutory requirements are to take precedence.

The information contained in this EMP is based on the project description as provided in the environmental scoping report. Where the design or exploration methods alter, this EMP may require updating and potential further assessment undertaken.

#### 1.6 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy, a Namibian consultancy registration number CC/2013/11401, has prepared this document on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa in the public and private sector. ECC is independent of the proponent and has no vested or financial interest in the proposed project except for fair remuneration of professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or post to the following address:

### **Environmental Compliance Consultancy**

PO BOX 91193

Klein Windhoek, Namibia

Tel: +264 81 669 7608

Email: info@eccenvironmental.com



#### 2 PROJECT MANAGEMENT PERSONNEL

The proponent shall provide a project team to oversee and undertake the preparation and exploration activities, which shall be composed of the proponent's personnel and contractors. A single nominated role, as accountable person, shall be identified to ensure the management and implementation of this EMP throughout the duration of the project, which shall be supported by the proponent.

### 2.1 ORGANISATIONAL STRUCTURE, ROLES AND RESPONSIBILITIES

The proponent shall be responsible for:

- Ensuring all members of the project team, including contractors, comply with the procedures set out in this EMP;
- Ensuring that all personnel are provided with sufficient training, supervision, and instruction to fulfil this requirement; and
- Ensuring that any persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above. The key personnel and environmental responsibilities of each role through the project life are presented in Table 1.

**TABLE 1 - ROLES AND RESPONSIBILITIES** 

ROLE	RESPONSIBILITIES & DUTIES	
Proponent	<ul> <li>Overall responsibility for the implementation and management of this EMP;</li> <li>Ensure the environmental policy is communicated to all personnel throughout the proposed project and ensure that employees, contractors and visitors understand and adhere to the EMP;</li> <li>Responsible for providing the required resources (including financial and technical) to complete the required tasks;</li> <li>Appoint supervisors such as an exploration (project) manager and a site manager;</li> </ul>	
	<ul> <li>Ensure that all employees, contractors and visitors are inducted on environment measures as outline in the scoping and EMP reports and safety measures as compiled by the proponent.</li> </ul>	
Exploration Manager	<ul> <li>Responsible for ensuring compliance with this EMP including overseeing all day to day activities during the duration of the project, including routine and non-routine maintenance works, as well as the decommissioning of the project;</li> <li>Ensure adequate resources are made available for implementation of this EMP;</li> <li>Responsible for the management, maintenance and revisions of this EMP;</li> <li>Ensure all personnel are aware of, adhere to and enact the commitments made in this EMP and any other relevant regulatory requirements applicable to the project;</li> </ul>	



	<ul> <li>Ensure all employees and contractors participate in a site induction process prior to commencing work on the project;</li> <li>Maintain the community issues and concern register, and keep records of complaints;</li> <li>Ensure that best environmental practice is undertaken throughout the duration of the project; and</li> <li>Report any non-compliance or accidents to the regulatory authority.</li> </ul>
Site Manager (or nominated supervisor)	<ul> <li>Ensure that all employees, contractors and visitors to the site are conversant with the requirements of this EMP, relevant to their roles on site and adhere to this EMP at all times;</li> <li>Provide environmental awareness / management training and site inductions for all employees, contractors and visitors;</li> <li>Monitor daily operations and ensure adherence by personnel to the EMP;</li> <li>Receive, respond to and record complaints; and</li> <li>Report any non-compliance or accidents to the explorations (project) manager.</li> </ul>
Employees (and contractors and visitors where applicable)	<ul> <li>Responsible for being compliant with this EMP throughout the project;</li> <li>Adhere to this EMP at all times;</li> <li>Ensure attendance of site inductions;</li> <li>Ensure appropriate briefings for certain activities have been provided and are fully understood; and</li> <li>Report any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the site manager and exploration manager.</li> </ul>
	<ul> <li>Responsible for asking if in doubt</li> <li>Responsible for reporting exceptions and incidents immediately to their supervisor</li> </ul>

#### 2.2 CONTRACTORS

Any contractors hired during the exploration activities or for any accessory works for the project, or contractors appointed for maintenance activities, shall be compliant with this EMP, and shall be responsible for the following:

- Undertaking activities in accordance with this EMP as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements;
- Implementing appropriate environmental management measures;
- Reporting of environmental issues, including actual or potential environmental incidents and hazards immediately to the Exploration Manager; and
- Ensuring appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported.



#### 2.3 EMPLOYMENT

The proponent (and all contractors) shall comply with the requirements of the Regulations for Labour, Health and Safety and any amendments to these regulations. The following shall be complied with:

- In liaison with local government, community, stakeholders and relevant authorities the proponent shall ensure that local people have access to information about job opportunities, and are considered first for establishment / maintenance and relevant contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and qualifications and the hiring process described and communicated (transparent);
- The maximum length of time the job is likely to last for shall be clearly indicated;
- Foreign workers with no proof of permanent legal residence shall not be hired; and
- Every effort shall be made to recruit from the pool of unemployed workers living in the local area.



#### 3 COMMUNICATION AND TRAINING

In order to ensure potential risks and impacts are minimised, it is vital that personnel are appropriately informed and trained on operational procedures that include the above mitigation measures. It is also important that regular communications are maintained with all the stakeholders and made aware of potential impacts and how to minimise or avoid them. This section sets out the framework for communication and training in relation to the EMP.

#### 3.1 COMMUNICATIONS

During exploration, the exploration manager and or site manager shall communicate any environmental issues to the project team through the following means (as and when required):

- Site induction;
- Audits and site inspections;
- Toolbox talks, including instruction on incident response procedures; and
- Briefings on key project-specific environmental issues.

This EMP shall be distributed to the exploration team including any contractors and personnel working on the exploration site to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations shall be briefed to workers and contractors.

During the exploration activities, communications between the management team shall include discussing any complaints received and actions to resolve them, incidents and responses, any inspections, audits or non-conformance with this EMP, and any objectives or target achievements.

#### 3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

Table 2 contains a list of numbers to be contacted in case of an emergency. All personnel will be made aware of these numbers. These numbers will be posted on each drill site and available within each company vehicle.

**TABLE 2 - EMERGENCY CONTACT DETAILS** 

TOWN	AMBULANCE	POLICE	FIRE BRIGADE
Otavi	+264 (67) 23-4194	+264 (67) 23-4006	-
Kombat	+264 (67) 23-1000 / 1038	+264 (67) 231- 086	+264 (67) 23-1000
Otjiwarongo	+264 (67) 30-3734	+264 (67) 1-0111	+264 (67) 30-4444

#### 3.3 COMPLAINTS HANDLING AND RECORDING

Any complaints received verbally by any personnel on the project site shall be recorded by the site manager or the receiver, including the name and contact details of the complainant, date and time of the complaint, and the nature of the complaint. The information shall be given to the exploration manager who is overall responsible for the management of complaints and will



provide a written response to the complainant. The site manager shall inform the exploration manager of issues, concerns or complaints. It is the duty of both the site manager and exploration manager to maintain a complaint register that details the name of the complainant, date and time of the complaint and action taken to resolve the issues.

The workforce shall be informed about the complaints register, its location and the person responsible, in order to refer residents or the general public who wish to lodge a complaint. The complainant shall be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register as well as confirmation a documented response was provided.

The complaints register shall be kept for the duration of the project and will be available for government or public review upon request.

#### 3.4 Training and Awareness

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training, and experience.

#### 3.4.1 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with a specific environment and social awareness training component. The environment and social awareness training shall ensure that personnel are familiar with the principles of this EMP, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The exploration manager shall ensure a register of completed training is maintained.

The site induction should include, but not limited to the following:

- A general site-specific induction that outlines:
  - What is meant by "environment" and "social"
  - Why the environment needs to be protected and conserved
  - How exploration activities can impact on the environment
  - What can be done to mitigate against such impacts
- The inductee's role and responsibilities with respect to implementing the EMP;
- The sites environmental rules;
- Details of how to deal with, and who to contact if environmental problems should they
  occur;
- Basic vegetation clearing principles and species ID sheets;
- Noise control measures for drilling in proximity to residents;
- Focal themes such as compliance, reporting of accidents and incidents, good housekeeping and standard procedures for waste management;



- The potential consequences of non-compliance with this EMP and relevant statutory requirements; and
- The role of responsible people for the project.



# 4 REPORTING, COMPLIANCE AND ENFORCEMENT

#### 4.1 Environmental Inspections and Compliance Monitoring

#### 4.1.1 DAILY COMPLIANCE MONITORING

A copy of this EMP shall be on site throughout the project and shall be available upon request. It is the responsibility of the exploration manager to ensure this EMP is complied with through their daily roles. Daily, weekly and monthly inspections will be undertaken. Any environmental problems or risks identified shall be notified to the exploration manager and actioned as soon as is reasonably practicable.

#### 4.1.2 MONTHLY COMPLIANCE MONITORING

Monthly inspections shall be undertaken by the exploration manager to check that the standards and procedures set out in this EMP are being complied with and pollution control measures are in place and working correctly. Any non-conformance shall be recorded, including the following details: a brief description of non-conformance, the reason for the non-conformance, the responsible party, the result (consequence), and the corrective action taken and any necessary follow up measures required.

#### 4.1.3 REPORTING

There shall be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or accident, is immediately reported to the exploration manager.

#### 4.2 ENVIRONMENTAL PERMITS

Whilst the Water Resources Management Act, No. 11 of 2013 is not enforced, it is best practice to adhere to its stipulations while ensuring compliance with the Water Act, No. 54 of 1956, which is still maintained. A licence to abstract and use water may be required if boreholes are to be created, although this is unlikely. If required, the proponent will apply for relevant permits and shall operate in accordance with any conditions of the licence.

Some vegetation will be cleared on the EPL to allow exploration activities to commence. It is unlikely that an area greater than 15ha will be cleared, therefore a permit under the Forest Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005 and its regulations of 2015 is not required.

#### 4.3 CHANCE FINDS PROCEDURES

In an unlikely event of high sensitivity and valuable heritage findings, the proposed project shall be in line with the procedures set out below to cover the reporting and management of such finds.

**Scope:** The "chance finds" procedure covers the actions to be taken from the discovery of a heritage site or item to its investigation and assessment by a trained archaeologist or other appropriately qualified person.

Compliance: The "chance finds" procedure is intended to ensure compliance with relevant



provisions of the National Heritage Act (27 of 2004), especially Section 55 (4): "a person who discovers any archaeological .... object .....must as soon as practicable report the discovery to the Council".

The procedure of reporting set out below must be observed so that heritage remains reported to the NHC are correctly identified in the field:

ROLE	RESPONSIBILITIES & DUTIES	
Operators and contractors	To exercise due caution and stop work if archaeological remains are found. Notify Supervisor immediately.	
Site manager	To secure site and advise management in a timely manner (immediately)	
Proponent and Exploration managers	To determine safe working boundary and request inspection	
Archaeologist	To inspect, identify, advise management, and recover remains	

#### 4.3.1 PROCEDURES

Action by person identifying archaeological or heritage material:

- If operating machinery or equipment stop work
- Identify the site with flag tape
- Determine GPS position if possible
- Report findings to foreman

#### Action by site manager:

- Report findings, site location and actions taken proponent and exploration managers
- Cease any works in immediate vicinity

Action by proponent and exploration managers:

- Visit site and determine whether work can proceed without damage to findings
- Determine and mark exclusion boundary
- Site location and details to be added to project GIS for field confirmation by archaeologist
   Action by archaeologist:
  - Inspect site and confirm addition to project GIS
  - Advise NHC and request written permission to remove findings from work area
  - Recovery, packaging and labelling of findings for transfer to National Museum

In the event of discovering human remains, procedures are to be carried out as per the above. Moreover, a field inspection by archaeologist is to be conducted to confirm that remains are human, following a liaise with NHC and Police. Thereafter, the recovery of remains and removal to National Museum or National Forensic Laboratory, should be conducted as directed.



#### 4.4 Non-compliance

#### 4.4.1 Non-compliance event

Where exceptions with this EMP are identified, the exploration manager shall employ corrective actions so that the works return to being compliant as soon as possible. For incidents such as spills, workers on site are required to respond immediately to stop the spill from getting worse, if safe to do so. Assuming two workers or more are on site, then one can report immediately and the other stops the spill, if safe to do so. Spill cleanup equipment can be used immediately, if safe to do so. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice shall be produced. The notice shall be generated during the inspections and the exploration manager shall be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event / situation, for example, is considered if:

- There is evidence of a contravention of this EMP and associated indicators or objectives;
- The exploration manager and or contractor have failed to comply with corrective or other instructions issued by the exploration manager or qualified authority; or
- The exploration manager and or contractor fail to respond to complaints from the public.

Activities shall be stopped in the event of a non-compliance until corrective action(s) has been completed.

#### 4.5 INCIDENT REPORTING

The exploration manager must ensure that an accident and incident (including minor or near-miss) reporting system is maintained so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first aid being administered and the location being made safe.

The exploration manager must investigate the cause of all work accidents and significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

#### 4.5.1 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator(s). Such action may take the form of (but is not limited to):

- Fines / penalties;
- Legal action;
- Monetary penalties imposed by the proponent on the contractor;
- Withdrawal of licence(s); and



- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression / non-compliance, and penalties are to be weighed against the severity of the incident.



#### 5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

#### 5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT

This chapter provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as roles responsible. This register will be subject to regular review by the exploration manager and updated when necessary.

The exploration manager and or site manager (if applicable) will use this register to undertake monthly inspections (see next section) to ensure the project is compliant with this EMP.

#### 5.2 OBJECTIVES AND TARGETS

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Minimal vegetation clearing and earthworks;
- Protect local flora and fauna;
- Minimise the generation of waste; and
- Minimal interruption to farm activities.

#### 5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental scoping report. From this, a schedule of environmental commitments and risks has been produced (Table 3), which details deliverables including measures identified for the prevention of pollution or damage to the environment during exploration.

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible person. This register will be subject to regular review by the exploration manager and updated when necessary. The exploration manager will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.



#### TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	<ul> <li>Limiting access to the farms,</li> <li>Disruption of farm operations (leaving gates open, loss of farming area, interference at waterpoints)</li> <li>Potential conflict with farm owners and neighbours (suspicious movement, poaching, stock theft, field fires, etc.)</li> </ul>	<ul> <li>Ensure documented permission of who may enter the farms for exploration purposes is provided to the farmers</li> <li>No unauthorised movement on farms is allowed,</li> <li>Farmers should always have access to all farm areas at all times</li> <li>Existing water points and feeding area must remain unaffected</li> <li>Use existing roads for access to avoid new tracks and cut lines</li> <li>Compliance with all applicable laws and agreements.</li> </ul>	Daily	
Access and site preparation	Potential damage to cultural heritage sites	<ul> <li>Implementation of the Chance Find Procedure</li> <li>Ensure awareness about possible heritage finds</li> <li>Report all finds that could be of heritage importance</li> <li>In a case archaeological remains are to be uncovered, cease activities and the exploration manager has to assess and demarcate the area</li> <li>Exploration manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and consult with ECC, appointed archaeologist with GPS position</li> <li>If needed, further investigation has to be requested for a professional assessment and the necessary protocols of the Chance Find Procedure have to be followed,</li> <li>Archaeologist will evaluate the significance of the remains and identify appropriate action, for</li> </ul>	Monthly	<ul> <li>Exploration manager and or site manager (or nominated site supervisor</li> </ul>

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General exploration activities	<ul> <li>Potential grievances and complaints,</li> <li>Social discomfort and anxiety</li> </ul>	example, record and remove; relocate or leave premises (depending on the nature and value of the remains),  Inform the police if the remains are human,  Obtain appropriate clearance or approval from the competent authority, if required, and recover and remove the remains to the National Museum or National Forensic Laboratory as directed.  Develop and implement an operations manual or procedures to work on private farms and implement monitoring programmes thereafter,  Maintain regular and frequent communication with I&APs to identify concerns and mitigation measures,  Compliance with all applicable laws and agreements  Training and raise awareness to sensitize employees about contentious issues such as stock theft and poaching and resources constraints  Ensure appropriate supervision of all activities  Accidents and incidents need to be mitigated, reported to exploration manager and recorded in incident register	Weekly, monthly	<ul> <li>Exploration         Manager</li> <li>Employees,         contractors</li> <li>Site manager         (or nominated         site supervisor</li> </ul>
	Residing and nesting organisms in proximity to proposed project area can be disturbed, injured or killed by movement of vehicles and equipment during exploration activities	<ul> <li>Restrict movements to areas of activities only</li> <li>Use existing tracks and routes only</li> <li>Identify rare, endangered, threatened and protected species in advance</li> <li>Route new tracks around protected species and sensitive areas</li> <li>Restrict movements to daytime hours</li> <li>Training and raise awareness to sensitize employees and notify them on avoiding some areas</li> <li>No driving off designated access routes (into the bush) / off-road driving</li> </ul>	Weekly	<ul> <li>Exploration manager and or site manager (or nominated site supervisor</li> <li>All staff</li> </ul>



	<ul> <li>No animals or birds may be collected, caught, consumed, or removed from site</li> <li>Avoid disturbance to rocky outcrop areas and bird nesting areas.</li> </ul>	
<ul> <li>Residing and nesting organisms in proximity to the proposed project area can be disturbed as a result of ambient noise from operations and movements of vehicles and equipment</li> <li>Conflict with farmers and</li> </ul>	<ul> <li>Restrict excessive noise to areas of activities only,</li> <li>Restrict excessive noise to daytime hours (7 am to 5 pm weekdays and 7 am until 1 pm on Saturday),</li> <li>No activities between dusk and dawn,</li> <li>Drill equipment shall be suitably positioned to ensure that noisy equipment is away from receptors,</li> <li>Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property,</li> </ul>	Daily
neighbours about ambient noise	<ul> <li>All equipment to be shut down or throttled back between periods of use,</li> <li>Respect civic aviation regulations about the use of a drone</li> </ul>	
<ul><li>Visual disturbances</li><li>Loss of Sense of Place</li></ul>	<ul> <li>Position drill equipment in such a way that it is out of sight from human receptors,</li> <li>Barriers or fences shall be used if drilling occurs in, locations that may affect residents or livestock,</li> <li>Residents need to be informed at least two weeks in advance that drilling operations are within 1km of their property,</li> <li>Maintain good housekeeping,</li> <li>Apply dust suppression where possible,</li> <li>Maintain continuous communication with I&amp;APs to identify concerns and mitigation measures</li> </ul>	Daily, weekly
– Dust and emissions	<ul> <li>All vehicles and machinery / equipment to be shut down or throttled back between periods of use,</li> <li>Use existing access roads and tracks where possible,</li> <li>Apply dust suppression where possible,</li> </ul>	Daily



	<ul> <li>Restrict speed of vehicles (&lt;30km/h),</li> <li>Specific activities that may generate dust and impact on residents shall be avoided during high wind events.</li> </ul>		
<ul> <li>Loss of soil quality due to mixing of earth matter, trampling, compaction and pollution,</li> <li>Enhanced soil erosion</li> </ul>	<ul> <li>Where possible, plan access routes, drill pads and camps outside of existing drainage lines</li> <li>Where necessary, install diversions to curb possible erosion</li> <li>Restore drainage lines when disturbed</li> <li>Topsoil should be stockpiled separately, and respread during rehabilitation</li> <li>Limit the possibility of compaction and creating of a hard subsurface</li> <li>Limit the possibility of trampling</li> <li>During drilling oil absorbent matting should be placed under and around the rig</li> <li>Equipment must be in a good condition to ensure that accidental oil spills do not occur and contaminate soil</li> <li>In the event of spills and leaks, polluted soils must be collected and disposed of at an approved site,</li> <li>Limit the possibility to mix mineral waste with topsoil</li> </ul>	Weekly	
Groundwater contamination	<ul> <li>Ensure drill pads and spill kits are in place,</li> <li>Consider alternative sites when the water table is too high,</li> <li>Drill system should be dug to direct any accidental spills into sumps,</li> <li>Wastewater shall be contained,</li> <li>Where possible, water from existing water sources shall be used with a compensation agreement with the farm owner in place,</li> <li>Properly functioning chemical toilets shall be used only</li> </ul>	Weekly	



Vegetation clearance for access routes, drill pads and	<ul> <li>Loss of plant species</li> <li>Loss of habitat</li> <li>Create landscape scars</li> <li>Loss of Sense of Place</li> </ul>	<ul> <li>Use existing roads for access to avoid new tracks and cut lines</li> <li>Minimise clearance areas through proper planning of the exploration activities</li> <li>Route new tracks around established and protected trees, and clumps of vegetation</li> <li>Identify rare, endangered, threatened and protected species.</li> <li>During toolbox talks and induction, highlight to workers so that the removal of significant plants are avoided</li> <li>Where possible rescue and relocate plants of significance</li> <li>Promote revegetation of cleared areas upon completion of exploration activities</li> </ul>	Daily	<ul> <li>Employees,         contractors</li> <li>Site manager         (or nominated         site supervisor</li> </ul>
temporary contractor camps	Alien plants and weeds can accidentally be introduced	<ul> <li>All project equipment arriving on site from an area outside of the project or coming from an area of known weed infestations (not present on the project site) should have an internal weed and seed inspection completed prior to equipment being used</li> <li>Ensure the potential introduction and spread of alien plants is prevented, and</li> <li>Ensure the correct removal of alien invasive vegetation and prevent the establishment and spread of alien invasive plants.</li> <li>Eradicate weeds and alien species as soon as they appear</li> <li>Make workers aware about alien species and weeds</li> </ul>	Monthly	<ul> <li>Site manager (or nominated site supervisor</li> </ul>
Fuel handling and storage, maintenance on equipment,	<ul><li>Soil contamination</li><li>Water contamination</li></ul>	<ul> <li>Good housekeeping</li> <li>Training through toolbox talks and induction</li> <li>All stationary vehicles and machinery must have drip trays to collect leakages of lubricants and oil</li> </ul>	Daily	<ul><li>Employees,</li><li>contractors</li><li>Site manager</li><li>(or nominated</li></ul>



machinery and vehicles		<ul> <li>Spill kits and absorption material available during fuel delivery, storage or use</li> <li>Accidental spills and leaks to be cleaned soonest</li> <li>Spills to be reported to the exploration manager</li> <li>Fuel spills of greater than 200 litres to be reported to the authorities</li> </ul>		site supervisor
		<ul> <li>Plant and equipment to be well maintained and serviced regularly (maintenance and service schedules in place),</li> <li>In the field, use of hydrocarbons under 200 litres can be used for mobile refuelling or servicing</li> <li>Bulk fuel will be stored in adequate containment areas (on a non-porous floor, in a bunded area, capable to contain 110% of the volume stored)</li> <li>Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged containers)</li> <li>Refuelling and de-fuelling in designated areas (with adequate preventative measures in place) only</li> </ul>		
Generation of waste	<ul> <li>Soil contamination</li> <li>Water contamination</li> <li>Nuisance (visual impacts, potential litter from exploration activities and campsite)</li> <li>Ecological risks</li> </ul>	<ul> <li>Good housekeeping</li> <li>Training and awareness through toolbox talks and induction</li> <li>Implement a Standard Operational Procedure on waste management, from cradle to grave for all kinds of waste possible on-site (e.g. hydrocarbons, domestic, waste water)</li> <li>Implement a culture of correct waste collection, waste segregation and waste disposal, complimentary to the waste hierarchy – avoid, reuse, recycle</li> <li>Appropriate and functional toilets shall be ensured for the campsites</li> <li>Avoid hazardous waste on site</li> </ul>	– Daily and weekly	<ul><li>Employees, contractors</li><li>Site manager (or nominated site supervisor</li></ul>



		Maskauskan disabangan will be esektived		
		Wastewater discharges will be contained – no		
		disposal of waste water		
Terrestrial biodiversity destruction due to uncontrolled fire outbreaks	<ul> <li>Veld fires during high wind periods</li> </ul>	<ul> <li>No open fires are allowed to be lit by personnel associated with the proponent anywhere on the EPL outside of dedicated campsites;</li> <li>The proponent to ensure that exploration campsites have proper cooking facilities available to use. Gas stoves are the preferred option;</li> <li>No cigarette butts are allowed to be discarded into the environment. These should be contained inappropriate domestic containment bins and disposed of at the local landfill site;</li> <li>No unauthorised movement beyond the exploration areas and campsites is allowed; and</li> <li>Proper fire hazard identification signage to be placed in areas that store flammable material (i.e. hydrocarbons and gas bottles).</li> </ul>	- Daily inspection of operations	<ul> <li>Exploration         Manager</li> <li>Employees,         contractors</li> <li>Site manager         (or nominated         site supervisor</li> </ul>
Resources and Infrastructure e	<ul> <li>Constraint on resources (i.e. water) due to on-going exploration activities. Deterioration of roads due to frequent movement of machinery and vehicles on site.</li> <li>Run-off of rainwater due to erosion caused by continuous driving during wet soil conditions</li> </ul>	<ul> <li>Restrict speed of vehicles (&lt;30km/h) should be adhered to on site.</li> <li>Designated roads and tracks should be used.</li> <li>Consider reusing, recycling, and reducing consumption rates to conserve resources.</li> <li>Residents shall be provided at least two weeks' notice of drilling operations within 1 km of their property</li> <li>Use of resources (i.e. abstraction of water from existing boreholes) is used and accessed subject to agreements with the landowners.</li> <li>All pumps and water flow outlets should be properly closed and diligently handled.</li> <li>Avoid driving on farm roads and access tracks during heavy rain periods.</li> <li>No tracks or roads shall be created during the wet season.</li> </ul>	Daily inspection of operations	<ul> <li>Exploration Manager</li> <li>Employees, contractors</li> <li>Site manager (or nominated site supervisor</li> </ul>



		Roads shall be properly maintained i.e. excess loose		
		material shall be removed and defects fixed.		
Heritage	- Disruption of heritage sites.	In case of discovering or unearthing heritage sites, the following measures (Chance Find Procedure) shall be applied:  - Works to cease and the area to be demarcated with appropriate tape by the site supervisor, and the site manager to be informed;  - The site manager to visit the site and determine whether work can proceed without damage to findings, mark exclusions boundary and inform the environment and social manager with the GPS position if possible  - If works cannot proceed without damage to findings, the site manager informs the environmental manager who will get in touch with an archaeologist who will provide advice.  - Exploration manager or an archaeological specialist to evaluate the significance of the remains and identify appropriate action, for example, record and remove; relocate or leave in situ (depending on the nature and value of the remains);  - Inform the police if the remains are human, and Obtain appropriate clearance or approval from the competent authority. if required, recover and remove the remains to the national museum or	Daily inspection	<ul> <li>General         Manager, and</li> <li>Deputy         Manager (or         nominated         supervisor)</li> </ul>
		national forensic laboratory as directed.		
Job creation, skills development and business opportunities	Beneficial socio-economic impacts on a local and regional scale	<ul> <li>Maximise local employment and local business opportunities</li> <li>Enhance the use of local labour and local skills as far as reasonably possible with training</li> <li>Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.</li> </ul>	-Monthly	<ul><li>Exploration manager</li></ul>



#### 6 IMPLEMENTATION OF THE EMP

Exploration work will be carried out in compliance with the relevant requirements of the Minerals (Prospecting and Mining) Act, 1992. No significant impacts are anticipated for the activities that have been identified and management and mitigation measures are in place for potential risks.

#### This EMP:

- A. Has been prepared pursuant to a contract with the proponent;
- B. Has been prepared on the basis of information provided to ECC up to November 2021;
- C. Is for the sole use of the proponent, for the sole purpose of an EMP;
- D. Must not be used (1) by any person other than the proponent or (2) for a purpose other than an EMP; and
- E. Must not be copied without the prior written permission of ECC.

ECC has prepared the EMP on the basis of information provided by the proponent, specialist reports and the environmental scoping report.



Votorantim Metals (Pty) Ltd

# **APPENDIX B - BID**















ECC-88-351-BID-01-D

# BACKGROUND INFORMATION DOCUMENT EXPLORATION ACTIVITIES ON EPL 8127

FOR BASE AND RARE METALS, INDUSTRIAL MINERALS, AND PRECIOUS METALS

\*\*PREPARED FOR\*\*

VOTORANTIM METALS NAMIBIA (PTY) LTD



**JUNE 2021** 



# **BACKGROUND INFORMATION DOCUMENT**

# PROPOSED EXPLORATION ACTIVITIES ON EPL 8127 FOR BASE AND RARE METALS, INDUSTRIAL MINERALS, AND PRECIOUS METALS IN THE OTJOZONDJUPA REGION

#### 1 PURPOSE OF THIS DOCUMENT

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I&APs) a background to the proposed project and to invite I&APs to register as part of the Environmental and Social Impact Assessment (ESIA) process.

The proposed project involves exploration activities for base and rare metals, precious metals on Exclusive Prospecting Licence (EPL) 8127, held by Votorantim Metals Namibia (Pty) Ltd.

Through registering for the project, all I&APs will be kept informed throughout the ESIA process, and a platform for participation will be provided to submit comments / recommendations pertaining to the project.

This BID includes the following information:

- The proposed project and location;
- The necessity of the project, potential benefits or adverse impacts anticipated;
- The alternatives to the project that have been considered and assessed;
- How the ESIA process works;
- The public participation process and how to become involved; and
- Next steps and the way forward.

# 2 DESCRIPTION OF PROPOSED PROJECT

#### 2.1 Brief Introduction

Environmental Compliance Consultancy (ECC) has been engaged by the proponent

(Votorantim Metals Namibia (Pty) Ltd) to undertake an ESIA and an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations. An environmental clearance application will be submitted to the relevant competent authorities, the Ministry of Mines and Energy (MME) and Ministry of Environment, Forestry and Tourism (MEFT).

#### 2.2 LOCATION

Votorantim Metals proposes to explore in the Otjozondjupa Region in an area approximately 40km southeast of Otavi and 5km northeast of Kombat via the B8 road. The EPL can be accessed via the D2806 road. The location is shown in Figure 1.

#### 2.3 WHAT IS PROPOSED

Votorantim Metals provides metal and mineral mining services worldwide. Votorantim Metals undertakes mineral exploration in Namibia and propose to undertake low impact exploration activities on EPL 8127.

#### 2.4 Why is the Project Needed

Votorantim Metals intends to pursue exploration opportunities in Namibia with the aim of identifying new mining prospects. Namibia is rich with natural resources and the minerals sector is a key contributor to the nations GDP in Namibia. Exploration could lead to mining activities, which would



contribute to the national and local economy.

#### 2.5 OPERATION PHASE

The proposed exploration activities are lowimpact and non-intrusive. The following are envisaged during the proposed project:

- Soil sampling
- Regional geological mapping
- Limited vegetation clearing for the creation of tracks;
- Potential creation of cut-lines for geophysical surveys;
- Ground and airborne geophysical surveys;
- Opening access tracks in bushencroached areas, where there are not sufficient existing tracks; and
- Drilling exploration boreholes.

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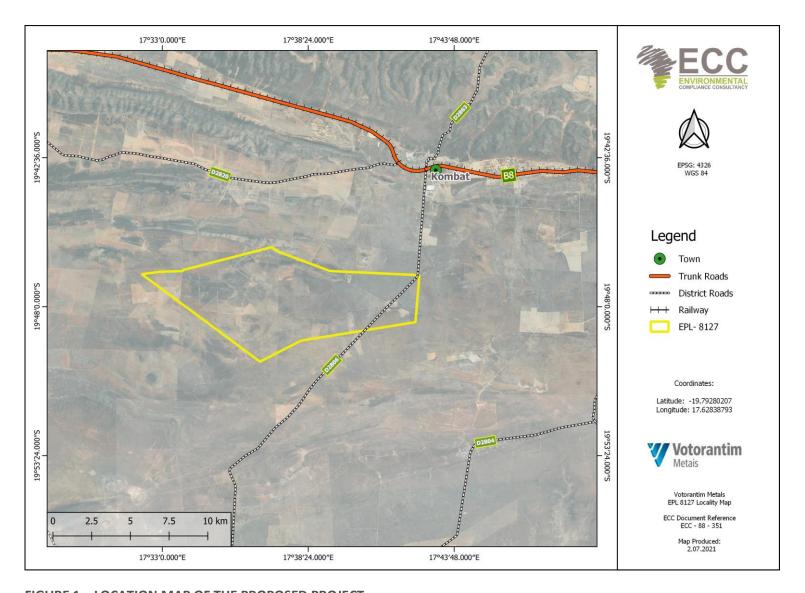


FIGURE 1 – LOCATION MAP OF THE PROPOSED PROJECT



#### 2.6 POTENTIAL IMPACTS OF THE PROJECT

#### 2.6.1 SOCIO-ECONOMIC

The potential social impacts are anticipated to be of low significance, and those that may transpire shall be confined within the EPL site, these potential impacts may include the following:

- Potential to unearth, damage or destroy undiscovered heritage remains;
- Minor disruption to the residents of the farms within the EPL, including some potential increase in noise levels and dust arising from drilling and vehicle use;
- Potential poaching/ livestock theft impacts due to the increased movement of people in the area;
- Potential risk of uncontrolled fire occurrences, possibly from the exploration team camping on site;
- Some jobs will be created as a result of the project; and
- There will be economic benefits due to increased investment and investor confidence in the Namibian minerals sector.

#### 2.6.2 ENVIRONMENTAL

The potential environmental impacts are anticipated to be of minor significance, and those that may occur shall be contained within the EPL site, these potential impacts may include the following:

- Some clearing of bush-encroached areas for access on foot and by car; the vegetation is expected to recover fully during ensuing rain seasons;
- Potential use of resources, including groundwater; and
- Minor risk of spillage of hydrocarbon, chemical or drill fluids from exploration activities may potentially lead to localised ground contamination; this aspect will be controlled at all times.

# 3 CONSIDERATION OF ALTERNATIVES

Best practice environmental assessment methodology calls for consideration and assessment of alternatives to a proposed project.

In a project such as this one, it is difficult to identify alternatives to satisfy the need of the proposed project; the activities shall be specific to the EPL 8127, which was granted by the MME on the 25<sup>th</sup> of March 2021.

During the assessment, alternatives will take the form of a consideration of optimisation and efficiency to reduce potential effects e.g. different types of technology or operations, route access and exploration methods.

# 4 THE ENVIRONMENTAL ASSESSMENT PROCESS

This ESIA, conducted by ECC, is undertaken in terms of the Environmental Management Act, 2007 and its regulations. The process followed in this ESIA is set out in the flowchart in Figure 2.



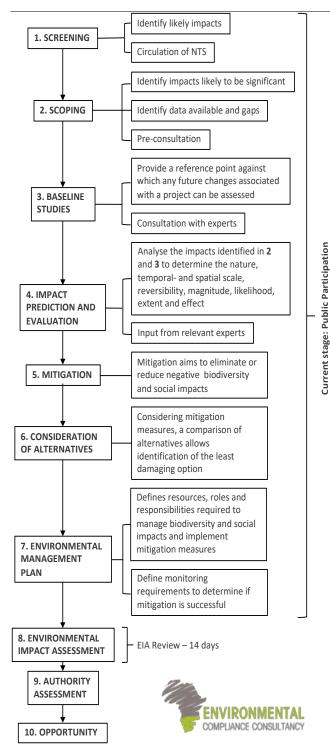


FIGURE 2 - FLOWCHART OF THE ENVIRONMENTAL ASSESSMENT PROCESS

#### 4.1 SCREENING

A review of the proposed project screening findings against the listed activities was conducted; the findings of which are summarised below.

#### **FORESTRY ACTIVITIES**

- (4) The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.
  - Limited vegetation clearing may be required for tracks and survey access creation, and possibly for the set up for survey and drilling teams' field camps.

#### WATER RESOURCE DEVELOPMENT

- (8.1) The abstraction of ground or surface water for industrial or commercial purposes
  - For the drilling of exploration boreholes, ground water may need to be abstracted, or water will be sourced.

#### MINING AND QUARRYING ACTIVITIES

- (3.1) The construction of facilities for any process or activities which requires a licence, right or other form of authorisation, and the renewal of a licence, right or other form of authorisation, in terms of the Minerals (Prospecting and Mining Act), 1992
  - The proposed project has obtained an EPL from MME; now requires an environmental clearance from DEA/MEFT for the search of base and rare metals, industrial minerals and precious metals.



 Minerals (e.g. soil and sand) will be sampled within selected target areas of the project area.

The potential environmental and social effects are anticipated to be of minor significance, and those that may occur shall be contained on the EPL 8127 site.

#### 4.2 SCOPING

Due to the nature of the proposed project, and the implementation of industry best practice mitigation measures during the mineral exploration phase of the project, the effects on the environment and society are expected to be minimal and localised.

#### 4.3 BASELINE STUDIES

For the proposed project, baseline information was obtained through a desk-based study and site verification processes through focusing on the environmental receptors that could be affected by the proposed project. ECC will also engage with stakeholders, I&APs and the proponents to seek input into the assessment.

#### 4.4 IMPACT ASSESSMENT

Impacts will be assessed using the ECC ESIA methodology. The ESIA will be conducted in terms of the Environmental Management Act, 2007 and its regulations. ECC's methodology for impact assessments was developed using IFC standards in particular Performance Standard 1 'Assessment and management of environmental and social risks and impacts' (IFC 2012, 2017) and Namibian Draft Procedures and Guidance for ESIA and EMP (GRN, 2008) including international and national best practice with over 25 years of combined ESIA experience.

#### 4.5 ENVIRONMENTAL MANAGEMENT PLAN

An EMP shall be developed for the proposed project setting out auditable management actions for Votorantim Metals Namibia (Pty) Ltd to ensure careful and sustainable management measures are implemented for their activities in respect of the surrounding environment and community.

#### 4.6 Public Participation and

#### **ADVERTISING**

Public participation is an important part of the ESIA process; it allows the public and other stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment, in addition it can aid the design process. This project is currently at the scoping phase and public participation phase.

At this phase ECC will perform the following:

- Identify key stakeholders, authorities, municipalities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Distribute the BID for the proposed project (this document)
- Advertise the environmental application in two national newspapers
- Place notices on-site at or near the boundary
- If required host a public meeting to encourage stakeholder participation and engagement, and provide details of issues identified by the environmental practitioner, stakeholders and I&APs
- Record all comments of I&APs and present such comments, as well as responses provided by ECC, in the comments and responses report, which will be included in the scoping report that shall submitted with the application, and



- Circulate I&AP comments to the project team for consideration of project design.

Comments must be submitted in writing and can be emailed using the details in the contact us section below.

#### **CONTACT US**

We welcome any enquiries regarding this document and its content. Please contact:

Environmental Compliance Consultancy (ECC)

info@eccenvironmental.com

Tel: +264 816 697 608

#### www.eccenvironmental.com

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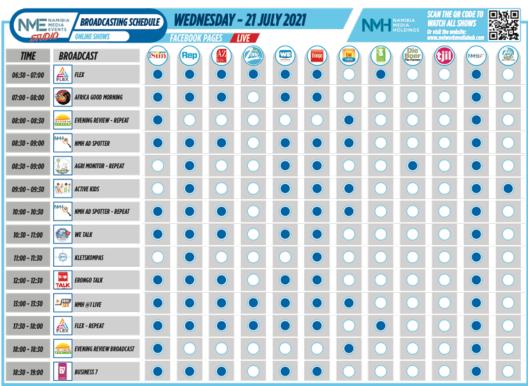


Votorantim Metals (Pty) Ltd

# **APPENDIX C - EVIDENCE OF PUBLIC CONSULTATION**

The following was advertised in the 'Republikein, Sun, and Allgemeine Zeitung' newspapers on the 21<sup>st</sup> July 2021.







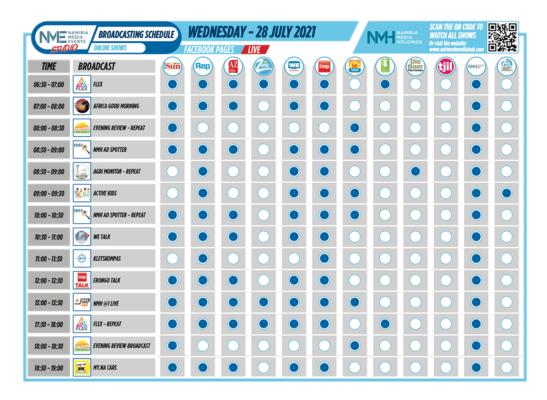
Votorantim Metals (Pty) Ltd

The following was advertised in the 'Republikein, Sun, and Allgemeine Zeitung' newspapers on the 21<sup>st</sup> July 2021.

WEDNESDAY 28 JULY 2021 Market Watch Republikain Sun WAllgemeine Zeitung 3









Votorantim Metals (Pty) Ltd

#### **SITE NOTICE**

# NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS EXPLORATION ACTIVITIES ON EPL 8127



OTJOZONDJUPA REGION, NAMIBIA

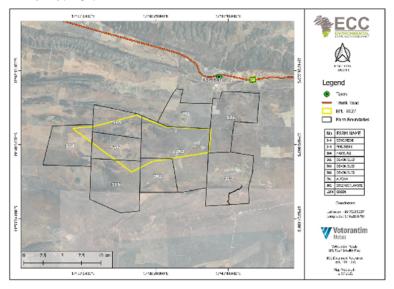
Environmental Compliance Consultancy cc (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in accordance with the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Environmental Assessment Practitioner (EAP): Location: Project ID: Yotorantim Metals Namibia (Pty) Ltd Environmental Compliance Consultancy Otjozondjupa Region, Namibia ECC-88-351

Proposed Project Activity: The proponent, Votorantim Metals Namibia (Pty) Ltd, propose to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 8127 in the Otjozondjupa Region, Namibia

The site can be accessed via the B8 road southeast of Otavi. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys). Exploration sampling and drilling may occur at a later stage should initial test results appear viable.

Location of EPL 8127: Otjozondjupa Region, Namibia



**I&APs Registration:** The purpose of the review and registration period is to introduce the proposed project and to afford Interested and Affected Parties (I&APs) an opportunity to register and comment on the Background Information Document (BID), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

I&APs and stakeholders are required to register for the project at: www.eccenvironmental.com/projects

The team at ECC will then maintain contact with all registered I&APs to engage and to keep them informed as the ESIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.



Contact: Mr JS Rezuidenhout or Mrs J Mooney
Environmental Complia rue Consultancy
Registration Number CC/2013/11404
PO Box 91193, Klein Windhoek
Tel: +26481669 7608
E-mail: inf@eccenvironmental.com
Website:|www.eccenvironmental.com/projects









Votorantim Metals (Pty) Ltd

### REGISTERED MAIL AND STAKEHOLDER LIST

Votorcutim - ECC - 88 - 351 LIST OF REGISTERED ITEMS POSTED by Environmental Compliance Consultancy Registration Sender's Addressee's name and address reference no. o: Educar/ Nothamer Buchon Du To, t FMB100314 or Pierr of PTN10 of Form Niethanks To- Peter Jensi Funn Hamburg To: Bernuclus SENA Linde To Got Egyert investment ( To Bosylinde Natrule From Steenbox wate TO: Segen Firming CPty Funn Segen P.O. Pox 63 Obens Date-stamp Received by ..... Number of items. No compensation will be considered unless enquiry regarding this postal article is made within one year after the date of posting. P1 / 185

MARCH 2022



Votorantim Metals (Pty) Ltd

# Environmental Compliance Consultancy website:

# www.eccenvironmental.com



### Exploration activities on EPL 8127

Exploration activities on EPL 8127 for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region, Namibia.

The proposed project involves the exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 8127 in Otjozondjupa Region, operated by Votorantim Metals Namibia (Pty) Ltd.

The proposed project is to conduct mineral exploration activities on EPL 8127. As part of the proposed exploration project, the following activities are envisaged, which shall be confirmed, as the exploration program is refined:

Project Details



### LOG OF ALL COMMENTS AND RESPONSES GENERATED THROUGHOUT PUBLIC CONSULTATION

No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
COM	IMENTS REC	CEIVED BA	SED ON THE ADVERTS PUBLISHED	AND THE BAC	CKGROUND INFORMATION DOCUMENT AND
ENV	IRONMENT	AL ASSESS	MENT NOTICE PROVIDED TO REG	ISTERED INTER	RESTED AND AFFECTED PARTIES (I&APS)
1.			Dear Mr Bezuidenhout I refer to your letter of 5 July 2021, which was sent by registered post on 10 August and which we received yesterday, 3 September 2021, nearly 2 months later. From this it is obvious that other lines of communication have to be found. I am happy that ECC values community input and participation as this can be of great value to your study. Me and my neighbours have about 60 (sixty) years' experience of exploration activities on our privately owned land. Over these years we have experienced the impact of these activities on the environment	Mr. Peter Zensi Farm Hamburg Via email & phone call 04.09.2021	Response from ECC 22.09.2021  FOR ATTENTION: MR. PETER ZENSI - FARM HAMBURG, 504  Dear Mr. Peter Zensi,  RE: PUBLIC CONSULTATION DURING THE  ENVIRONMENTAL IMPACT ASSESSMENTS, FOR  VOTORANTIM METALS NAMIBIA PROPOSED  EXPLORATION ACTIVITIES ON EPL 8127 IN THE  OTJOZONDJUPA REGION, NAMIBIA.  Environmental Compliance Consultancy (ECC) has been engaged by Votorantim Metals Namibia (Pty) Ltd to act on their behalf for the environmental impact assessments for the proposed exploration activities for base and rare metals, industrial minerals, and precious metals in the Otjozondjupa Region, Namibia. Following your correspondence sent via email on the 04 <sup>th</sup> September 2021, ECC would like to acknowledge that we have received your comments and concerns regarding the proposed exploration activities near Kombat. Please be informed that relevant comments and concerns received from stakeholders are recorded and



B. (	CI.		10.45 / / 1 1 1 1	6. 1 1 11	votorantim Metals (Pty) Ltd
No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			and would like to input these		addressed within the scoping and environmental
			into your study from the		management plan reports, which will be provided to
			beginning and not only give		Interested and Affected Parties (I&APs), affording a 7 days'
			comments at the end, which is		review period as per the Environmental Management Act
			unlikely to have any influence on the outcome.		(EMA), No. 7 of 2007 requirements. We will send this notice
			I have already indicated to Ms		for access to the reports in due course, should you wish, we
			Willemse, that I want to be		could print and post the hard copies to you.
			heard as a directly affected		Regarding some of your concerns stated, we would like to
			party. Thus, I cannot		inform you that ECC has engaged with I&APs by advertising
			understand, why you expect me		in two national newspapers, placing the site notice in the
			to do it again via internet.		vicinity of the proposed Project area, sending postal
			As we are only 5 directly		registered mail, emails, and phoning the neighboring
			affected farmers, I suggest you		farmers to exercise at most methods of communication.
			engage directly with us:		In terms of Section 22 of the EMA and its regulations of 2012,
			Invite us to Kombat Lodge Inn or another suitable location		for the purpose of registering I&APs. A public meeting is not
			close by (not Windhoek)		a requirement during the public consultation process. As a
			Propose alternative dates and		result, from the public consultation feedback and comments,
			times that will suit you		a public meeting was not deemed necessary for this Project
			Pick the one that suits all		either. The feedback from the directly affected parties
			parties.		(neighboring farmers or landowners) did not indicate the
			Give us an overview of your		need to hold a public meeting.
			work and what aspects of the		ECC aspires to involve and engage with stakeholders in
			environment you are going to		transparency as an independent consultant. For this
			consider		purpose, we have made the Proponent "Votorantim" well
			We shall add on to that from		aware of your concerns and they have indicated to us, that
			our experience.		aware or your concerns and they have indicated to us, that



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			In this way you make sure to get valuable community input and participation into your Project and that it will be a meaningful EIA and not only a copy of one of the many you may have completed.  Thanking you		there were already previous communication and resolved issues between yourselves.  However, the Proponent would still like to extend the engagement and correspondence with you by having a one-on-one meeting. The Proponent further suggested that when you are in Windhoek, we could have this meeting at the Votorantim offices. Alternatively, a meeting could be set up in October 2021, with the directors of the Project s in Otavi, near Kombat or on your farm to discuss any further concern or unresolved issues.  As per your request, the proof of communication for both EPLs 8127 and 6927 are enclosed (please refer to Appendix A & B).  We hope that this letter satisfies your request for response.
			Good Day! We received your mail. Thank you! We are waiting for your team to complete the contract. Please phone before you arrive on our premises so that the owner is on site. PLEASE NOTE: WE ARE ON HIGH ALERT!!!! BECAUSE OF STOCK THEFT AND POACHING!!!	JP von Maltzahn Via email & phone call 6.08.2021	Dear Mr. Maltzahn, Thank you for your email. We have acknowledged your concerns and will forward the message as such to the Proponent for their records.



-					Votorantim Metals (Pty) Ltd
No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			It is illegal to enter our premises		
			without reporting and the		
			consent of the owner.		
			Kind regards.		
			J.P.von Maltzahn		
601/	INACNITO DE	CENTED D	,	FRORT AND FR	AD DOOMED TO DECICTEDED INTERECTED AND AFFECTED
			ASED ON THE DRAFT SCOPING R	EPORT AND ER	MP PROVIDED TO REGISTERED INTERESTED AND AFFECTED
PAR	TIES (I&APS	5)			
2.			We must, first mention that a seven-	Mr. M Von	Refer to Section 2.7 describing the review periods as provided
			day period to review over hundred	<u>Maltzahn via</u>	throughout the public consultation phase.
			pages of information is quite short,	<u>email</u>	Furthermore, a face-to-face meeting was held with Mr Zensi by the
			taking into consideration that we have	16 November	Proponent during the latter part of November 2021.
			an unreliable internet connection and	<u>2021</u>	Refer to Appendix B of this report which contains evidence of site
			that we have full-time work that		notices placed as per the EM Act regulations.
			requires our attention from 07-18		
			daily. This letter also includes some of		
			Peter Zensi's thoughts, because of the		
			short notice and since he does not		
			currently have access to his computer.		
			We know that this is the period		
			specified in the legal framework, but		
			one could consider whether good		
			practice would be at least two weeks'		
			notice.		
			We want to point out that this		
			exploration company has been		
			working in this area, and on Mr.		
			Zensi's farm and the company has		
			over time developed a terrible		
			reputation. Our scepticism and		
			concerns are thus related specifically		



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
	опорес:		received	details	
			to the company that now demand access to our farms. Furthermore, Mr. Zensi asked for a meeting in Kombat, and this meeting has not yet taken place. We are now more than 50 % of the affected parties, and we demand a formal meeting in Kombat to discuss the reports and the upcoming exploration. This includes more information on the specific sites of EPL 8127, and the details of the EPL 8127. To our knowledge there have been no notices on the perimeter of the EPL 8127 informing the affected parties of the exact boundaries.	details	
			We demand written contracts before any exploration can be conducted on the farms. From previous experiences, we know that there will be considerable costs and expenses related to having the exploration teams on our farms and that we will be expected to handle the damages and repairs related to their activities. A written contract clearly stipulating the responsibilities, fines, actions, and environmental mitigations must be in place before any work can commence.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence.



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			Roads  In the Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. From previous experiences, we know for a fact that the activities have caused huge disruptions and problems. We rely on our farm roads for all our farming activities, and we depend on them to be always drivable. We cannot afford to risk that heavy use of these fragile roads will negatively affect our ability to conduct our livelihoods. In the wet season we prohibit all exploration activities.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	The conditions associated with the use of access roads by the exploration team will be negotiated and agreed to between the landowner and the Proponent and included in the land access agreement prior to commencing with exploration activities. See Table 9 for further recommendations to maintain road surfaces.
			The use of water from the boreholes on the farms will need to be discussed and agreed on and specified in a contract. Farm Segen does not have water available for the exploration activities and thus water must be	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case no permit applications are necessary. Agreements and conditions are negotiated between the Proponent and the landowner. Should water not be sufficient the Proponent may buy and transport water to site.



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
	31.0.pcc.	30000011	received	details	100-100-100-100-100-100-100-100-100-100
			supplied by the Proponent and brought to site.  Accommodation  We will not allow accommodation in the form of camps on the farms, and we expect all personnel to be off the farms in the hours between sunset and sunrise.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. This aspect is encouraged to be included in the land access agreement with specific terms and conditions as agreed to between both parties.
			Farming activities  No one of our farming activities should be affected by the exploration activities. This includes beef production based on a rotational grazing system and irrigation.	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property. The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence. Refer to Table 9, page 82 of 103 that stipulate that farm owners should always have access to all areas of their farms to allow their business to continue uninterrupted.
			We would like to stress the importance of a meeting here in Kombat for discussing the necessary contract stipulating the activities that are to be undertaken on the farm.  This exploration company has a really bad track record. Peter Zensi and other farmers have already been subjected to their bad practices, and although the Scoping Report plus Impact Assessment mentions mitigations to limit the negative effects of the exploration activities, we	Mr. M Von Maltzahn via email Farm Segen 16 November 2021	Noted. Land access agreements will be entered into between the Proponent and the applicable landowners before any exploration work can commence on private property.  The land access agreement will contain all the terms and conditions agreed to by both parties before exploration can commence.



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			know that these measures have not been taken.  There is no access to our farms until we have signed written contracts.		
			2.10 of the EIA a monitoring strategy and audit procedure will be determined by the <b>Proponent</b> and competent authority. Who is this competent authority? In the 2.5 years Votorantim are prospecting on Hartbeespoort I have not noticed any monitoring nor a competent authority.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Competent authorities for the proposed Project are MME and MEFT. Monitoring and audit procedures are done by the independent auditor as set up by the Proponent and when required by the competent authority. Quarterly and annual reports are submitted to MME as per the requirements of the EPL mineral rights.
			Page 26 of 95 abstraction of ground water needs a permit and quantities must be reported. Who controls that this is done?	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project is required to apply for an abstraction permit should they intend to drill a borehole for water abstraction. Alternatively, the Proponent may have agreements with the farmers or landowner to abstract water from the existing boreholes. In this case no permit applications are necessary. Agreements and conditions are negotiated between the Proponent and the landowner. Should water not be sufficient the Proponent may buy and transport water to site.
			Soil Conservation" Makes provision for the <u>prevention and control</u> of soil erosion." All I find in the EMP are diversions to control erosion, no mention of prevention. Please add measures to prevent erosion i.e., no driving during wet conditions which	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7, Table 9 of the impact assessment and the EMP page 25 of 27, Table 3. The creation of access roads point noted and added.



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			can lead to deep tracks and run-off of rainwater and erosion. New access roads e.g., to a drill site not to run up straight on a slope etc.		
			Prospecting should take 2 – 6 months? Votorantim were busy from June 2019 and started drilling in June 2021 – 2 years.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Exploration activities are granted by the EPL licence for 3 years and by the environmental clearance certificate for 3 years and therefore should the Proponent obtain all necessary approvals; they can prospect on the specific EPL for the validity period. Exploration activities may be classified in different phases.
			Page 50 of 95 The noise is not the problem, it is the continual movement of vehicles and people on the farm: no stranger is allowed to move on the farms, as this is private property. Now suddenly every day strangers are allowed to move freely in vehicles and on foot around your private property. This causes a lot of stress to the owner/manager as any stranger is seen as a potential danger to the safety and property of the residents on the farm. It makes the control of stock theft, theft of solar panels and submersible pumps much more difficult. Although you mention that theft may increase due to	Peter Zensi Farm Hamburg # 504 21 Nov. 21	For clarity in our study, it has been assessed that the exploration team may be blamed for stock theft due to their presence in the area. Please refer to the ESIA chapter 7, Table 9 page 69 of 95 and the EMP Table 3, pages 19 of 27 and 20 of 27.



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No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			Votorantim's activities I do not find		
			any mitigation in your study.		
			Page 54 of 95 Employment of people from Otavi: Votorantim and their contractors must make sure to employ trustworthy people with good references from previous employers. These employees are a potential threat to the safety of farmers and their property. Votorantim must provide the farmer with a list of names, as well as copies of ID documents and residential addresses.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project . The proposed Project has their own HR policies and selection procedures of employees. Please be informed that access agreements are only negotiated between the Proponent of the proposed Project and the farm owner and not the environmental consultant.
			Page 58 of 95 Waste management: no mention of the danger of cattle and wildlife being infested with measles due to infected person defecating into the veld. Long lasting, as once infected, measles stays in the body of the animal for the rest of its life. When slaughtered, N\$ 10.00 per kg slaughter weight is being deducted from the proceeds, as this meat cannot be sold as fresh meat. 250 kg slaughter weight x 10.00 = N\$ 2,500.00 per infected carcass.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	Transmission of Measles: Measles is a highly contagious virus that lives in the nose and throat mucus of an infected person. It can spread to others through coughing and sneezing. Also, measles virus can live for up to two hours on a surface or in an airspace where the infected person coughed or sneezed. If other people breathe the contaminated air or touch the infected surface, then touch their eyes, noses, or mouths, they can become infected. Measles is so contagious that if one person has it, 90% of the people close to that person who are not immune will also become infected. In the EMP Table 3, page 24 of 27 it states that appropriate and functional toilets shall be ensured for the campsites



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			Page 61 of 95 Increased movement of people, machinery and vehicles leads to disturbance of wildlife which leaves the area. This is of major concern to farmers who rely on hunting and sale of venison for an income. Mitigation: please add "as little movement as possible, at low speeds. If wildlife is encountered, stop and give it time to move off slowly."	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7 Table 8, page 61 of 95 and EMP Table 3 page 20 of 27, moreover it states that Restrict speed of vehicles (<30km/h) on site.
			Deterioration of roads: drive as little as possible, not at all during wet conditions. Make provision for rehabilitation of damaged roads by the <b>Proponent</b> . They leave the problems to the farmers. High magnitude of change and high significance, not minimal!	Peter Zensi Farm Hamburg # 504 21 Nov. 21	This has been addressed both in the ESIA chapter 7, Table 8 of the impact assessment and the EMP page 25 of 27, Table 3. Creation of access roads point noted and added.
			1.4 Management of the EMP. The monitoring of compliance shall be undertaken as well as monthly inspections. Who does these inspections? I have witnessed none of them.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel Table 1, page 8 of 27. The Table 3 further outlines the recommended monitoring periods and responsible personnel.



No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
			2.3 Employment: please add points mentioned above	Peter Zensi Farm Hamburg # 504 21 Nov. 21	It is best practice for the Proponent of the Project to consider the upliftment of locals, for this purpose Proponents are encouraged to employ local residents of the proposed Project . The proposed Project has their own HR policies and selection procedures of employees. Please be informed that access agreements are only negotiated between the Proponent of the proposed Project and the farm owner.
			5.2 Objectives Please add No damage to farm infrastructure e.g., Roads, water installations and fences.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	kindly refer to the EMP, Table 3 page 25 of 27.
			Groundwater: "Where possible, water from existing water sources shall be used" – please change to "for drilling Votorantim shall make provision for their own water sources" In our area we have enough water for our farming activities, but we do not have additional 30 m3 per day for drilling.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent may only use water resources such as existing boreholes subject to agreements with the landowner. In our studies water may be brought to site in a case where there is insufficient supply of water.
			Waste management: please explicitly mention functional toilets and who <b>must</b> inspect at which intervals, that they are used.	Peter Zensi Farm Hamburg # 504 21 Nov. 21	The Proponent of the proposed Project ensures monitoring are conducted during operations, the EMP states who are the responsible personnel. In the EMP Table 3, page 24 of 27 it states that appropriate and functional toilets shall be ensured for the campsites.
			Executive Summary "All site activities up to Votorantim's standards" This is very vague. What standards do Votorantim uphold?	Peter Zensi Farm Hamburg # 504	The Proponent has to comply to the standards, laws, and policies outlined in Namibian Laws such as the Environmental Management Act of 2007 and the Minerals (Prospecting and Mining) Act, 1992 (No. 33 of 1992).



#### **EPL 8127 Environmental Scoping Report Plus Impact Assessment**

Votorantim Metals (Pty) Ltd

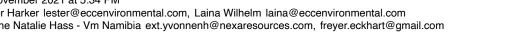
No.	Chapter	Section	I&AP / stakeholder comment	Stakeholder	Response / clarification
			received	details	
				21 Nov. 21	The Proponent's response: Votorantim Metals is a Namibian subsidiary of Nexa Resources that is a global company, listed in the stock Exchange of Toronto and New York. The main focus of the company is base metals, such as Lead, Zinc and Copper.  The exploration activities are part of the portfolio, and Votorantim aim to perform exploration in the ground to initially evaluate the mineral potential. The exploration reports and more information about Nexa can be seen in the link below. <a href="https://www.nexareport.com/2020/en/operations-and-Project s/">https://www.nexareport.com/2020/en/operations-and-Project s/</a>

From: Marcos Vinicius Veloso Da Silva marcos.silva.ms16@nexaresources.com

Subject: ECC - EPL-8127

Date: 29 November 2021 at 5:34 PM

To: Lester Harker lester@eccenvironmental.com, Laina Wilhelm laina@eccenvironmental.com Cc: Yvonne Natalie Hass - Vm Namibia ext.yvonnenh@nexaresources.com, freyer.eckhart@gmail.com



#### Dear Lester and Laina,

I had a meeting last few days ago with Mr. Zensi about many issues, including the ECC for the EPL-8127.

He raised some points that he wants ECC to include in the document that are reasonable requests.

- Wild-life The EC document doesn't mention anything about disturbance of wild life. EC should add to the main document a way to manage the work while wildlife is present. The farmer suggestion is to insert something like (should any wild animal is observed in the bush, cars and people must reduce their movement/ speed to the minimum as possible not to scary the animals);
- Chemical toilet must be present in the report as compulsory use concerning drilling activities while they are present in the farm;
- The document says about use of existing sources of water, but this must be written in a way that this is possible only after farmers consent, in which a compensation must be applied should it happens. If no water is available, then the company has to find another solution.
- Use of farm tracks: the company is responsible for fixing the tracks which were damaged by their use (including contractors).

These were his main concerns, which should be incorporated to the main text and not as an anexure.

Could you please revise the text and make those changes? After that, I suggest to resend another version to the affected farmers for evaluation.

Regarding a public meeting, I told the farmer that no application will be done until ECC makes the requested changes.

Eckhart/ Yvonne,

Please feel free to make comments or suggestions.

#### Regards,

In compliance with our obligations under the European Union General Data Protection Regulation, Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, please be informed that our Privacy Policy can be found under the "Privacy" Section of our website https://www.nexaresources.com/privacy-policy. This Policy may be updated from time to time and we encourage you to review it periodically.

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Este mensaje y sus anexos pueden contener información confidencial o privilegiada. Si usted no es el destinatario, por favor avise inmediatamente al remitente respondiendo este email y elimine el mensaje. Para los socios comerciales de Nexa Resources S.A.: en cumplimiento de sus obligaciones bajo el Reglamento General de Protección de Datos (UE) 2016/679, Nexa Resources S.A. solicita amablemente su atención a la Política de Privacidad, según se describe en la sección "Privacidad" en el sitio web https://www.nexaresources.com/privacy-policy. Esta política aplica a cualquier dato personal recibido / utilizado por la empresa Nexa Resources S.A. y podría estar sujeta a actualizaciones. Le recomendamos que lo revise periódicamente.



From: Mark von Maltzahn marki663@hotmail.com Subject: Fwd: EPL 8127 - EMP and Scoping report

Date: 4 March 2022 at 4:10 PM

To: stephan@eccenvironmental.com, jessica@eccenvironmental.com

Cc: mariska@eccenvironmental.com, lester@eccenvironmental.com, info ecc info@eccenvironmental.com

Good day Mrs Bezuidenhout Mooney and Mr Bezuidenhout

We received the link to the updated reports for EPL 8127. This being the Environmental scoping report plus impact assessment and EMP(Environmental management plan). We are an I&AP registered for the proposed EPL.

We refer to the email and letter dated 16 Nov 2021.

- 1. Was this letter and email received? We do not see any reference to our concerns raised in the mentioned letter (PDF attached to email) in the updated documents.
- 2. Mr Zensi raised some concerns that were addressed in the your documents. We support and agree with these concerns, and some of the concerns were addressed in the updated documents following Mr Zensi concerns.
- 3. What is the procedure for rehabilitation and cleaning/clearing of the Proponent's activities? Which mitigating efforts will be applied to keep the natural surrounding intact and/or rehabilitate the natural surroundings?
- 4. We are concerned with the monitoring and policing of the exploration activities. Who is the responsible authority that we can contact or approach if Votoratim does not adhere to the guidelines and/or our requests and concerns?

Regards

Mark Von Maltzahn For Segen Farming

Begin forwarded message:

From: Mark von Maltzahn < marki663@hotmail.com > Subject: EPL 8127 - EMP and Scoping report

Date: 16 November 2021 at 12:40:45 CAT

To: stephan@eccenvironmental.com, jessica@eccenvironmental.com

Good day Mrs Jessica Bezuidenhout Mooney & Mr Stefan Bezuidenhout

Please find attached letter in response to the Scoping report and impact assessment and environmental management plan for EPL 8127.

Please confirm receipt of this email and letter.

Regards

Mark Von Maltzahn



Reply ECC from Farm S...nsi.pdf



Farm Segen

P.O. Box 63

Otavi

**Environmental Compliance Consultancy** 

P.O. Box 91193

Windhoek

Namibia

# RE: Initial response on the information provided in the Environmental Management Plan and Environmental Scoping Report plus Impact Assessment

We must, first mention that a seven-day period to review over hundred pages of information is quite short, taking into consideration that we have an unreliable internet connection and that we have full-time work that requires our attention from 07-18 daily. This letter also includes some of Peter Zensi's thoughts, because of the short notice and since he does not currently have access to his computer. We know that this is the period specified in the legal framework, but one could consider whether good practice would be at least two weeks' notice.

We want to point out that this exploration company has been working in this area, and on Mr. Zensi's farm and the company has over time developed a terrible reputation. Our scepticism and concerns are thus related *specifically* to the company that now demand access to our farms.

Furthermore, Mr. Zensi asked for a meeting in Kombat, and this meeting has not yet taken place. We are now more than 50 % of the affected parties, and we demand a formal meeting in Kombat to discuss the reports and the upcoming exploration. This includes more information on the specific sites of EPL 8127, and the details of the EPL 8127. To our knowledge there have been no notices on the perimeter of the EPL 8127 informing the affected parties of the exact boundaries.

We demand written contracts before any exploration can be conducted on the farms. From previous experiences, we know that there will be considerable costs and expenses related to having the exploration teams on our farms and that we will be expected to handle the damages and repairs related to their activities. A written contract clearly stipulating the responsibilities, fines, actions, and environmental mitigations must be in place before any work can commence.

We would like to underline and stress some of the details or topics that will need to be included in the mentioned contract:

#### Roads

In the Scoping Report plus Impact Assessment there is mentioning of using mainly existing roads. This will need to be discussed and agreed on and specified in a contract. From previous experiences, we know for a fact that the activities have caused *huge* disruptions and problems. We rely on our farm roads for all our farming activities, and we depend on them to be always drivable. We cannot afford to risk that heavy use of these fragile roads will negatively affect our ability to conduct our livelihoods. In the wet season we prohibit all exploration activities.

#### Water

The use of water from the boreholes on the farms will need to be discussed and agreed on and specified in a contract. Farm Segen does not have water available for the exploration activities and thus water must be supplied by the proponent and brought to site.

#### Accommodation

We will not allow accommodation in the form of camps on the farms, and we expect all personnel to be off the farms in the hours between sunset and sunrise.

#### **Farming activities**

No one of our farming activities should be affected by the exploration activities. This includes beef production based on a rotational grazing system and irrigation.

We would like to stress the importance of a meeting here in Kombat for discussing the necessary contract stipulating the activities that are to be undertaken on the farm.

This exploration company has a really bad track record. Peter Zensi and other farmers have already been subjected to their bad practices, and although the Scoping Report plus Impact Assessment mentions mitigations to limit the negative effects of the exploration activities, we know that these measures have not been taken.

There is no access to our farms until we have signed written contracts.

On behalf of Peter Zensi and Segen Farming

Kombat, 15 November 2021

Mark von Maltzahn

# NOTICE OF AN ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS EXPLORATION ACTIVITIES ON EPL 8127



#### OTJOZONDJUPA REGION, NAMIBIA

Environmental Compliance Consultancy cc (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in accordance with the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant:

**Environmental Assessment Practitioner (EAP):** 

Location:

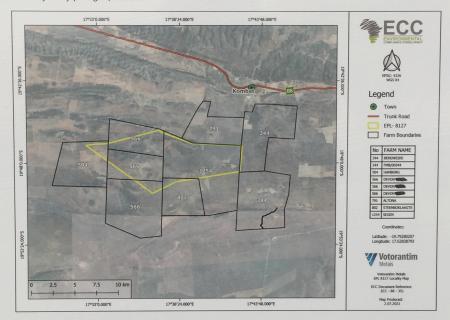
Project ID:

Votorantim Metals Namibia (Pty) Ltd Environmental Compliance Consultancy Otjozondjupa Region, Namibia ECC-88-351

Proposed Project Activity: The proponent, Votorantim Metals Namibia (Pty) Ltd, propose to carry out exploration activities for base and rare metals, industrial minerals, and precious metals on EPL 8127 in the Otjozondjupa Region, Namibia.

The site can be accessed via the B8 road southeast of Otavi. Exploration methods may include geochemical surveys (soil and rock sampling), geophysical surveys (electromagnetic surveys). Exploration sampling and drilling may occur at a later stage should initial test results appear viable.

Location of EPL 8127: Otjozondjupa Region, Namibia



**I&APs Registration:** The purpose of the review and registration period is to introduce the proposed project and to afford Interested and Affected Parties (I&APs) an opportunity to register and comment on the Background Information Document (BID), to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

I&APs and stakeholders are required to register for the project at: <a href="https://www.eccenvironmental.com/projects">www.eccenvironmental.com/projects</a>

The team at ECC will then maintain contact with all registered I&APs to engage and to keep them informed as the ESIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.



Contact: Mr JS Bezuidenhout or Mrs J Mooney Environmental Compliance Consultancy Registration Number CC/2013/11404 PO Box 91193, Klein Windhoek Tel: +264 81 669 7608 E-mail: info@eccenvironmental.com/projects www.eccenvironmental.com/projects







## EPL 8127 Environmental Scoping Report Plus Impact Assessment

Votorantim Metals (Pty) Ltd

D - ECC CVS



### CURRICULUM VITAE

### **LAINA WILHELM**



Profession: Assistant Environmental

Date of Birth: Practitioner

Nationality: 26 January 1994

Membership in professional bodie: Namibian

Email: EAPAN

Website: laina@eccenvironmental.com

Contact: <u>www.eccenvironmental.com</u>





#### **QUALIFICATIONS:**

Saint Petersburg Mining University, Russia:

2013 - 2019

Specialist Degree in Environmental

Engineering in Mining

(NQF Level 8)

#### **PROFILE:**

Laina is ECC's assistant environmentalist with an academic background in environmental engineering and mining. Laina aspires to contribute and express her knowledge and expertise in designing, planning and creating modern procedures and features aimed at controlling environmental impacts and hazards in Namibia

#### **KEY AREAS OF EXPERTISE:**

Environmental Management	-	Compiling compliance register Tenement management Environmental clearance applications
Environmental (and social) Impact Assessments (ESIAs)	-	Conducting and assisting in report writing for various small to large scale projects Compiling EIA Reports and EMPs
Laina Wilhelm Curriculum Vitae	1	Environmental Compliance Consultancy ECC

Administrations work

Submissions of applications to Competent Authorities.

Quotation requests and delivery of office essentials.

Preparing and submission of official letters Telephone and desk operating duties



#### **LANGUAGES:**

	English	Oshiwambo	Russian
Speak	Excellent	Excellent	Excellent
Read	Excellent	Excellent	Excellent
Write	Excellent	Excellent	Excellent



#### **SUMMARY OF EXPERIENCE AND CAPABILITY:**

Aug 2019 – Present: Environmental Compliance Consultancy

**Position: Assistant Environmental Practitioner** 

- Submission of projects to competent authorities and management of application for ECC on Ministry of Environment and Tourism (EIA portal)
- Providing professional consulting services to clients
- Drafting EIA adverts and Non-Technical Summary (NTS) documents
- Assisting in the development of scoping reports
- Environmental management plans for exploration
- ESIA applications for various industries

References: Mr. Stephan Bezuidenhout & Mrs. Jessica Bezuidenhout Money

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Jun 2018 – Aug 2018: Okorusu Fluorspar Mine

Position: Assistant Environmental Officer

- Water Level and air quality monitoring
- Environmental data collection, entry and Interpretation
- Compilation and submission of bi-Annual environmental and environmental management plan reports
- Environmental risk assessment

References: Mr Philip Hooks

©: +264 61 30 5444

Jul 2017 - Aug 2017: QKR-Navachab Gold Mine

Position: Assistant Environmental Officer

- Investigating methods of treatment, remediation and/or disposal of hydrocarbon waste products
- Contamination mapping
- Air monitoring and water monitoring
- Sampling of tailings
- Compilation of environmental reports

References: Mrs Marietjie Bell (\*\*): +264 64 55 2083

#### PROJECT EXPERIENCE

DATE	ROLE
2021	Environmental Assessment Practitioner
1	during EIA Process and project manager &
	team member
2021	<b>Environmental Assessment Practitioner</b>
	during EIA Process and project assistant
2019-2021	<b>Environmental Assessment Practitioner</b>
	during EIA Process and project manager
2020-2021	Group advisor and project manager
2020	Assistant auditor and project team member
2020	Environmental Assessment Practitioner and
	project team member
2020	<b>Environmental Assessment Practitioner</b>
	during EIA Process and project manager
2020	Team member
2020	<b>Environmental Assessment Practitioner</b>
	during EIA Process and project team
	member
2019	<b>Environmental Assessment Practitioner</b>
	during EIA Process and project manager
	2021 / 2021 d 2019-2021 2020-2020 2020 2020 2020

#### **CERTIFICATION:**

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

DATE:	11	_/_	_02_	_/_	_2021

**FULL NAME OF CONSULTANT: LAINA WILHELM** 



#### **CURRICULUM VITAE**

### JESSICA BEZUIDENHOUT

Name of Consultant: Jessica Bezuidenhout

**Position / Profession:** Environmental Specialist

Date of Birth: 24 October 1984

Nationality: Australian – Namibian Domicile, mother of a Namibian child.

**Email:** jessica@eccenvironmental.com

Website: www.eccenvironmental.com

Contact: +264 81 653 1214



#### **TERTIARY EDUCATION:**

**Federation University Australia:** 2003 – 2006 Bachelor of Applied Science – Environmental

Management

#### **OTHER TRAINING:**

- Management Systems Leadership
- ICAM Incident Causes Analysis Method
- Certificate II in Metalliferous Mining Core Safety and Risk Management
- Certificate III in Mine Emergency Response & Rescue
- Level 3 HLTFA402B Apply Advance First Aid Emergency Rope Rescue
- Level 2 21593VIC First Aid Level 2 Bonded Asbestos Removal > 10m<sup>2</sup>
- Leading and Managing People Brisbane North Institute of TAFE

#### **Professional Associations:**

- Chamber of Mines Namibia
- Women on Boards
- The Chamber of Minerals and Energy of Western Australia Industry Member Mining,
   Minerals and Resources
- Environmental Assessment Professional Association of Namibia (EAPAN)

#### **PROFILE:**

Jessica works as a Lead Environmental Practitioner with a diverse environmental background. Mrs Bezuidenhout has leading practical experience in fields of construction, exploration, monitoring and audit compliance, consultancy, operations, water treatment and wastewater treatment plants, environmental approvals, legal, minimising operational impacts, community liaison, including indigenous relationship management, mine closure and rehabilitation.

#### **KEY AREAS OF EXPERTISE:**

Environmental Management	-	Project Management
Environmental (and social) Impact Assessments (EIAs)	-	Conducting and managing various small to large scale EIAs Compiling EIA Reports and EMPs Coordinate and review specialist studies
Environmental & Social Compliance reporting	-	Environmental and Social compliance audits in the construction and mining industry



#### LANGUAGES:

ReadWriteSpeakEnglishExcellentExcellentExcellent



Jessica has 15 years of mining and construction experience in the SHEQ field, with 7 years of that being in Australia and 8 years in Namibia and Southern Africa. Her first three years were as an Environmental Systems Coordinator where she obtained regulatory approvals, oversaw operational budgets and bond management for mine closures, oversaw compliance and ensured environmental and social aspects of international management codes were adhered to. The following 3 years she worked in the environmental management field as a Site Environmental Manager managing various projects and brining sites into full compliance with environmental legislative frameworks, while also being responsible for the environment, sustainability, and social reporting portfolio. She then went on to work as an Environmental Consultant where she was responsible for mine closure and rehabilitation and sustainability reporting. Since 2016 Jessica has been a Managing Director of Environmental Compliance Consultancy (ECC) spearing heading many environmental impact assessments undertaken in Southern Africa, advising clients and has thus gained great practical experience and knowledge on local and international compliance and auditing standards such as IFC and the World Bank.

#### PROJECT EXPERIENCE

PROJECT	DATE	ROLE
Contracted services by The Australian Defence Force (ADF) for Environmental Management of Defence projects.	2006 – 2007	Environmental Project Manager
Site environmental officer and systems coordinator, Ballarat Goldfields.	2007 – 2010	Environmental Systems Coordinator
Managed the environmental and community aspects of three operations: Savannah Nickel Mine, Copernicus Nickel Mine (currently in care and maintenance) and the operations at Wyndham Port	2010-2013	Site Environmental Manager
A mine closure project taking an operating mine site into the rehabilitation and closure phase. This project involved the full development of a mine closure plan, facilitation of the government	2013-2014	Environmental Consultant

approvals, stakeholder engagement and technical environmental studies to inform the mine closure plan		
Full scale construction of new greenfield mine into an operational copper mine - Tschudi	2013-2016	HSE Manager
HSE management of operational underground mines, Otjihase and Matchless	2013-2016	HSE Manager
Director Environmental Compliance Consultancy	2016 – Current	Director and principle environmental practitioner
Projects completed while at ECC  The Environmental Impact Assessment (EIA) for the proposed Walvis Bay Waterfront development	2018	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Conduct the Namibian assessment on the laws and policies relating to six thematic areas based on a compendium of best practices for governments to best deal with the full range of issues related to mining.	2018	Lead Environmental Assessment Practitioner
ESIA amendment for B2Gold Namibia Mining Licence (ML 169) to developed underground mine working for the Otjikoto Gold Mine	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Kunene Regional Counsel Sustainable water supply Pipeline and Ancillary works	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
ESIA application for B2Gold Namibia 10.8 megawatt PV solar upgrade to the B2Gold Power Plant	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
EIA application for sand removal on Farm Okakongo Nord No. 58	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
EIA application for Uris irrigation scheme	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
MAWF permit application for Water Abstraction and Discharge for Uris Irrigation scheme	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
EIA application for University of Namibia (UNAM) Katima Mulilo Campus Expansion	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
EIA application for B2Gold exploration activities EPL 6627 & EPL 6628	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and

ESIA application for farm Tsumore 761 Unit B Irrigation Project	2019	PPP and report review)  Lead Environmental Assessment  Practitioner managing the EIA process  (including stakeholder engagement and
MAWF permit application for Water Abstraction and Discharge for Tsumore 761 Unit B Irrigation Project	2019	PPP and report review)  Lead Environmental Assessment  Practitioner managing the EIA process  (including stakeholder engagement and  PPP and report review)
ESIA application for Otjiwarongo Wastewater Treatment and Bulk Water Supply	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
ESIA for the Wastewater Treatment facilities for Gondwanan Collection	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
MAWF permit application for Water Abstraction and Discharge for Gondwanan Collection	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Conduct an environmental assessment in order to complete an Environmental Impact Assessment and Environmental Management Plan (EMP) for Marenica Energy.	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Appointed Environmental Practitioner for the B2Gold exploration activities on EPL 6949. Conduct an environmental assessment in order to complete an Environmental Impact Assessment and Environmental Management Plan (EMP)	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Marenica Energy to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) for EPL's 6663, 7435, 7436, 7278 & 7279 for Nuclear Fuel Minerals	2019	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Marenica Energy to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) on EPL's: 7703, 7340, 7303 & 7172 for Base and Rare Metals, Industrial Minerals, Precious Metals and Semi-Precious Stones.	2020	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Mertens Mining and Trading (Pty) Ltd, to undertake an Environmental Impact Assessment (EIA) and an Environmental Management Plan (EMP) to undertake bulk sampling, exploration activities and trial processing on EPL 7699.	2020	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Kuiseb Copper Company (Pty) (Ltd) to undertake an ESIA and an Environmental	2020	Lead Environmental Assessment Practitioner managing the EIA process

Management Plan (EMP) for EPLs: 7528, 7529, 7530, 7531, 7532, 7533, 7534, 7535, 7536, 7537, 7538, 7539, 7540, 7541, 7542, 7543, 7730, 7731, 7732,		(including stakeholder engagement and PPP and report review)
Exploration by Cheetah Minerals	2020	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Skorpion Zinc (Namzinc) (Pty) (Ltd) to undertake an ESIA and an Environmental Management Plan (EMP)	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Afritin Mining Namibia (Pty) Ltd to undertake the ESIA and Environmental Management Plan (EMP)	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Project Wings - engaged by Headspring Investments (Pty) Ltd to undertake the Environmental, Social and Impact Assessment and Environmental Management Plan	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Application for an Environmental Clearance Certificate for Twin Hills Gold Project	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by Votorantim Metals Namibia (Pty) Ltd to undertake the ESIA and Environmental Management Plan (EMP) for exploration activities on EPL 8127	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)
Engaged by to undertake an ESIA and an Environmental Management Plan (EMP) for the stage 2 expansion of the pilot tin processing plant on Mining Licence (ML) 134, held by Uis Tin Mining Company	2021	Lead Environmental Assessment Practitioner managing the EIA process (including stakeholder engagement and PPP and report review)

#### CERTIFICATION:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and experience.

DATE: 10/11/20

FUIL NAME OF CONSULTANT: JESSICA BEZUIDENHOU